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

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

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

1. Pre-Lodgement Meeting

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

2. Type of Consent being applied for

(more than one circle can be ticked):

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

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

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

◯ **Yes** ✔ **No**

4. Consultation

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

If yes, which groups have you consulted with?

Who else have you consulted with?

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

5. Applicant Details

Name/s: Mark Zeilstra

Email: [redacted]

Phone number:

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

6. Address for Correspondence

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

Name/s: Jess Meyst

Email: [redacted]

Phone number:

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

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

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

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

Name/s: As per property details in report

Property Address/ Location:

Postcode

8. Application Site Details

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

Name/s: Mark Zeilstra

Site Address/ Location: 229 & 290 Orira Road, Umawera

Postcode 0476

Legal Description: As per report **Val Number:**

Certificate of title: NA75B/113 & NA42B/990

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

Site visit requirements:

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

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

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

PLEASE CONTACT MARK 0274 738 210 PRIOR TO ENTRY
THIS IS A WORKING FARM

9. Description of the Proposal:

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

Undertake an eight lot subdivision of two titles over two stages at 229 & 290 Orira Road, Umawera.

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

10. Would you like to request Public Notification?

◯ **Yes** ✔ **No**

14. Billing Details:

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

Name/s: (please write in full) MARK GORDAN ZEILSTRA

Email: [redacted]

Phone number:

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

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

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

Name: (please write in full) MARK GORDAN ZEILSTRA

Signature:
(signature of bill payer [redacted] ATORY

Date 2/10/24

15. Important Information:

Note to applicant
You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.
You may apply for 2 or more resource consents that are needed for the same activity on the same form.
You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application
Under the fast-track resource consent process, notice of the decision must be given within 10 working days after the date the application was first lodged with the authority, unless the applicant opts out of that process at the time of lodgement.
A fast-track application may cease to be a fast-track application under section 87AAC(2) of the RMA.

Privacy Information:
Once this application is lodged with the Council it becomes public information. Please advise Council if there is sensitive information in the proposal. The information you have provided on this form is required so that your application for consent pursuant to the Resource Management Act 1991 can be processed under that Act. The information will be stored on a public register and held by the Far North District Council. The details of your application may also be made available to the public on the Council's website, www.fndc.govt.nz. These details are collected to inform the general public and community groups about all consents which have been issued through the Far North District Council.

Subdivision consent application

MARK ZEILSTRA

229 and 290 Orira Road, Umawera

reyburn & bryant

PLANNERS • SURVEYORS

Subdivision consent application

MARK ZEILSTRA

229 and 290 Orira Road, Umawera

Report prepared for:	Mark Zeilstra
Author	Jessica Meyst, *Planner*
Reviewed by:	Thomas Keogh, *Senior Planner*
Consent authority:	Far North District Council
Report reference:	17765
Report status:	Final
Date:	November 2024

Reyburn and Bryant
P.O. Box 191
Whangarei 0140
Telephone: (09) 438 3563

FORM 9

APPLICATION FOR RESOURCE CONSENT UNDER SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

To: Far North District Council
Memorial Avenue
Private Bag 752
Kaikohe 0440

1. Mark Zeilstra applies for resource consent to undertake an eight-lot subdivision of two existing titles over two stages.

2. The activities to which the application relates are:

   - Stage 1: Three-lot subdivision of NA75B/113.
   - Stage 2: Five-lot subdivision of NA42B/990.

3. The location of the proposed activities is 229 and 290 Orira Road, Umawera.

4. M G Zeilstra, P Diamond, CHD Trustees No 91 Ltd, and CHD Trustees (Diamondz) Ltd are the owners of the subject sites.

5. There are no other activities to which this application relates.

6. No additional resource consents or statutory approvals are needed for the activity to which this application relates that have not yet been applied for.

7. We attach an assessment of effects on the environment that:

   (a) includes the information required by clause 6 of Schedule 4 of the Resource Management Act 1991; and

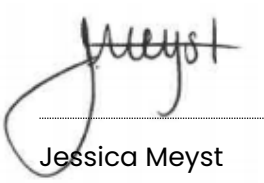
   (b) addresses the matters specified in clause 7 of Schedule 4 of the Resource Management Act 1991; and

   (c) includes such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.

8. We attach an assessment of the proposed activity against the matters set out in Part 2 of the Resource Management Act 1991.

9. We attach an assessment of the proposed activity against any relevant provisions of a document referred to in section 104(1)(b) of the Resource Management Act 1991, including information required by clause 2(2) of Schedule 4 of that Act.

10. No other information is required to be included in the district or regional plan(s) or regulations.



Jessica Meyst

1 November 2024

Date

Address for service:	Reyburn and Bryant 1999 Ltd PO Box 191, Whangarei
Telephone:	(09) 438 3563
Email:	jess@reyburnandbryant.co.nz
Contact person:	Jessica Meyst

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1. Records of title and memorials
2. Subdivision scheme plan
3. Subdivision suitability report
4. NRC Selected Land-use Register

ABBREVIATIONS

AEE	Assessment of Environmental Effects
FNDC	Far North District Council
FNDP	Far North District Plan
HAIL	Hazardous Activities and Industries List
LUC	Land Use Register
NES-SC	National Environmental Standard – Soil Contamination
NPS-HPL	National Policy Statement – Highly Productive Land
NPS-IB	National Policy Statement – Indigenous Biodiversity
PDP	Proposed Far North District Plan
RMA	Resource Management Act, 1991
RPZ	Rural Production Zone
SNA	Significant Natural Area

1. INTRODUCTION

1.1 Report basis

This report has been prepared for Mark Zeilstra in support of an application to undertake an eight-lot subdivision of two titles over two stages at 229 and 290 Orira Road, Umawera.

The application has been prepared in accordance with Section 88 and the Fourth Schedule of the Resource Management Act, 1991 (RMA). Section 88 of the RMA requires that resource consent applications be accompanied by an Assessment of Environmental Effects (AEE) in accordance with the Fourth Schedule.

The report also includes an analysis of the relevant provisions of the district, regional and national planning documents that are pertinent to the assessment and decision required under s104 of the RMA.

1.2 Proposal summary and rationale

The proposal is to undertake an eight-lot subdivision of two existing titles over two stages at 229 and 290 Orira Road, Umawera.

The proposal seeks to take advantage of two subdivision rules across two stages. Specifically, the three allotments proposed under stage 1 are justified under Rule 13.8.1(b), while the five allotments proposed under stage 2 are justified under Rule 13.8.1(c) of the Far North District Plan (FNDP).

Pt Section S13 Blk VII Mangamuka SD and Pt Section 11 Blk VII Mangamuka SD are zoned 'Rural Production' (RPZ) while Section 71 Blk VII Mangamuka SD and Section 80 Blk VII Mangamuka SD are zoned 'General Coastal' under the FNDP.

The Far North District Council (FNDC) notified the Proposed District Plan (PDP) on 27 July 2022. The sites are zoned 'Rural Production' (RPROZ) and are subject to the 'Coastal Environment' (CE), 'High Natural Character' (HNC), while small portions are subject to the 'River Flood Hazard Zone' and the 'Coastal Flood Zone' under this plan.

Resource consent is required for a **non-complying activity** from the FNDC under Rule 13.11 (a) of the FNDP due to the proposed number of lots. Given that the rules do not yet have legal effect, resource consent is not required under the PDP.

1.3 Property details

Applicant	Mark Zeilstra
Landowners	M G Zeilstra, P Diamond, CHD Trustees (Diamondz) Ltd and CHD Trustees No 91 Ltd
Site locations	229 and 290 Orira Road, Umawera
Records of title and legal descriptions	NA75B/113 (39.8693ha) Section 80 and Pt Section 13 Blk VII Mangamuka SD NA42B/990 (55.3897ha) Section 71 and Pt Section 11 Block VII Mangamuka SD
Total site area	95.2590ha
Operative District Plan	Far North District Plan (FNDP)
Operative District Plan Zoning	Rural Production Zone General Coastal Zone
Other Operative District Plan Notations	None
Proposed District Plan	Proposed Far North District Plan (PDP)
Proposed District Plan Zoning	Rural Production Zone
Other Proposed District Plan Notations	Coastal Environment (part) Coastal Flood (Zone 1, 2 and 3) (Part) River Flood Hazard Zone (100 Year ARI Event) (Part) High Natural Character (Part)

Table 1: Property details.

1.4 Relevant title memorials

NA75B/113 and NA42B/990 are subject to the following memorials:

NA75B/113 and NA42B/990

- Section 8 Mining Act 1971 and Section 168A Coal Mines Act 1925. These have no relevance to this application.

NA75B/113

- C038170.2 order for new certificate of title. This has no relevance to this application.

The records of title and memorials are attached in **Appendix 1**.

1.5 Other approvals required

Proposed amalgamation condition (s220(1)(b)(ii)

It is proposed that Lot 7 hereon & Section 71 BLK VII Mangamuka SD (Residue NA42B/990) be held in the same record of title.

No other approvals are required to give effect to the proposal.

1.6 Processing requests

Prior to the issue of any decision for this consent, please forward the draft conditions for our review and comment.

1.7 Statutory context

Resource consent is required for a **non-complying activity** under the FNDP. Section 104B and 104D of the RMA set out specific requirements for the determination of (in this case) non-complying activities, respectively. These are:

104B Determination of applications for discretionary or non-complying activities

After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority—

(a) may grant or refuse the application; and

(b) if it grants the application, may impose conditions under section 108.

104D Particular restrictions for non-complying activities

(1) Despite any decision made for the purpose of section 95A(2)(a) in relation to adverse effects, a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either-

(a) The adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii) applies) will be minor; or

(b) The application is for an activity that will not be contrary to the objectives and policies of—

(i) The relevant plan, if there is a plan but no proposed plan in respect of the activity; or

(ii) The relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or

(iii) Both the relevant plan and the relevant proposed plan if there is both a plan and a proposed plan in respect of the activity.

Section 104(1) of the RMA sets out the matters that a consent authority must, subject to Part 2, have regard to when considering application for resource consent.

104 Consideration of applications

(ii) When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to–

(a) any actual and potential effects on the environment of allowing the activity; and

(b) any relevant provisions of—

(iv) a national environmental standard:

(v) other regulations:

(vi) a national policy statement:

(vii) a New Zealand coastal policy statement:

(viii) a regional policy statement or proposed regional policy statement:

(ix) a plan or proposed plan; and

(c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

(iii) When forming an opinion for the purposes of subsection (1)(a), a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect.

This report focuses on the relevant matters in s104(1), and specifically:

- The actual and potential environmental effects (s104(1)(a)).
- The relevant provisions of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011 (NES-SC) (s104(1)(b)(i)).
- The relevant provisions of the National Policy Statement for Highly Productive Land (NPS-HPL) (s104(1)(b)(iii)).
- The relevant provisions of the National Policy Statement for Indigenous Biodiversity (NPS-IB) (s104(1)(b)(iii)).
- The relevant provisions of the operative and proposed FNDP (s104(1)(b)(vi)).

2. THE SITES AND SURROUNDING ENVIRONMENT

2.1 Site description

Location

The subject sites consist of two large land holdings with a combined area of approximately 95.2590ha (see Figure 1 below). The sites are located to the east of Orira River which follows the western boundaries of the sites. Orira Road divides NA42B/990 into two portions of land.

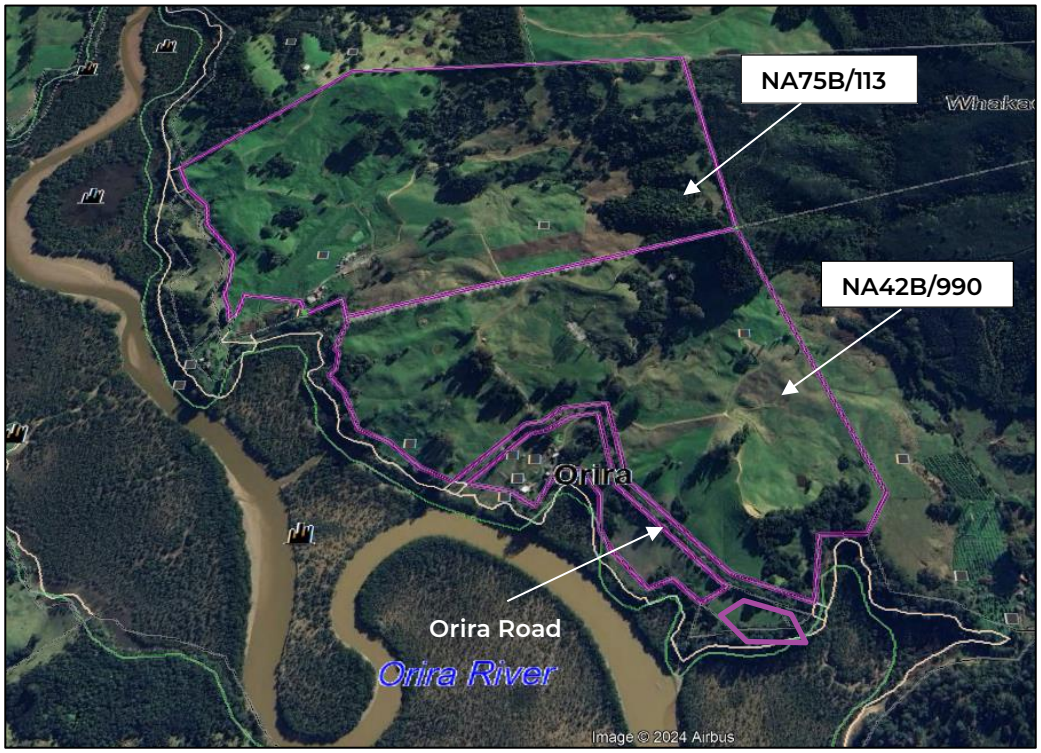


Figure 1: Location map (Source: Google Earth).

Built development

There is an existing dwelling and multiple farm accessory buildings located on each site.

Access arrangements

The dwelling and farm buildings on NA75B/113 gain direct access to Orira Road via a vehicle crossing and accessway. This is shown in Figure 2 on the following page.

Figure 2: Ex vehicle crossing to NA75B/113. (Source: Google Maps).

The dwelling and farm buildings on NA42B/990 each gain direct access to Orira Road via a separate vehicle crossing and accessway. The existing vehicle crossings are shown in Figure 3 and 4 below:

Figure 3: Ex vehicle crossing to the dwelling on NA42B/990. (Source: Google Maps).

Figure 4: Ex vehicle crossing to the farm buildings on NA42B/990. (Source: Google Maps).

There are additional vehicle crossings and farm tracks which allow access to the sites.

Orira Road has a metal formation.

Topography and waterbodies

The portion of NA42B/990 to the south of Orira Road contains the dwelling and farm buildings and has a gentle slope to the west. There is a gully to the south of these buildings.

The portion of NA42B/990 to the north of Orira Road is steep farmland which falls towards the south.

NA75B/113 is undulating with a moderate to steep slopes that fall towards Orira Road. There is a gully which runs through the centre of the site.

There are multiple man-made and naturally occurring ponds and watercourses/drains located throughout the sites.

Vegetation

NA42B/990 is predominantly pasture. Pockets of native and exotic vegetation are located throughout the site. The vegetation is denser along the road boundaries.

The western portion of NA75B/113, which is associated with the dwelling and farm accessory buildings, is mostly pasture with a few pockets of native vegetation. Mangroves and rush land/reeds are located near the road boundary.

The eastern portion of the site is mostly contained in native bush. A portion of this bush is subject to a Protected Natural Area (PNA) overlay. This area is identified in the subdivision scheme plan (**Appendix 2**).

Land Use Capability (LUC) Soil Classification

The Our Environment maps identify the soils at the sites as being class 6 under the LUC system. Refer to Figure 5 below:

Figure 5: LUC Soil Classification. (Source: Our Environment).

2.2 Surrounding environment

The sites form part of the small rural community of Umawera, Northland. The sites adjoin the Orira River which connects to the Hokianga Harbour to the south.

The surrounding land uses and pattern of development in the immediate vicinity generally consist of larger lots used for rural production and a low density of residential development.

3. THE PROPOSAL

3.1 General

The proposal is to undertake an eight-lot subdivision of two existing titles over two stages.

The proposed lot configuration is shown on the scheme plan attached in **Appendix 2**, and is summarised as follows:

Stage 1 – 3-lot subdivision of NA75B/113		
Lot number	**Area**	**Comments**
1	1.0755ha	This lot is vacant and will be developed for residential use. Access to this lot will be gained directly from Orira Road via an existing vehicle crossing.
2	4,000m²	This lot contains the existing dwelling. Access will continue via the existing vehicle crossing and accessway to Orira Road. This is facilitated by right of way easement 'B'.
8	51.62ha	This is the balance lot which contains the existing farm buildings. Access will remain via the existing vehicle crossing and accessway to Orira Road.
Stage 2 – 5-lot subdivision of NA42B/990		
Lot number	**Area**	**Comments**
3	2.0ha	This lot is vacant and will be developed for residential use.
4	2.02ha	This lot contains the existing dwelling and farm buildings. Access will remain via the existing vehicle crossings to Orira Road.

5	2.02ha	This lot is vacant and will be developed for residential use.
6	2.0ha	This lot is vacant and will be developed for residential use.
7 (amalgamated with Section 71 BLK VII Mangamuka SD)	31.27ha	This is the balance lot which will continue as a large land holding. Access will remain via the existing vehicle crossings to Orira Road and internal farm tracks.

Table 2: Lot configuration

3.2 Site suitability

RS Eng Ltd (RS) has prepared a subdivision suitability report (attached in **Appendix 3**) which identifies building platforms on proposed Lots 1, 3 and 5-6. The RS report addresses geotechnical stability, earthworks and onsite servicing arrangements, providing a subsequent set of geotechnical recommendations for future development.

RS has also considered the potential flood risk due to parts of proposed Lots 5-6 being located within the flood susceptible area. The report confirms that there is no risk with respect to flood risk as the identified building platforms will be elevated a minimum of 8.0-10.0m above this mapped area and the effluent disposal areas will not be located within this mapped area.

Subject to compliance with the recommendations of their report, RS concludes that the sites are suitable for development pursuant to s106 of the RMA.

It is anticipated that the recommendations of the RS subdivision suitability report will be encapsulated within the conditions of this subdivision consent.

3.3 Design justification/rationale

Stage 1 – subdivision of NA75B/113 to create proposed Lots 1-2 and 8

Proposed Lots 1-2 and 8 are justified under 13.8.1(b) of the FNDP. All of the proposed lots are in accordance with the minimum lot size requirement of 4,000m².

Stage 2 – subdivision of NA42B/990 to create proposed Lots 3-6 and Lot 7 (and amalgamated lot)

Proposed Lots 3-6 and Lot 7 (and amalgamated lot) are justified under Rule 13.8.1(c) of the FNDP. All of the proposed lots are in accordance with the minimum lot size requirement of 2ha.

3.4 Access arrangements

Stage 1

- Proposed Lot 1 will gain direct access via the existing vehicle crossing from Orira Road. It is proposed that the existing vehicle crossing is upgraded at building consent stage in accordance with the FNDC Engineering Standards (ES) 2009. A consent notice condition is anticipated to this effect.
- Proposed Lot 2 and 8 will continue to be accessed via the existing vehicle crossing and accessway to Orira Road. This will be facilitated by right of way easement 'B'. The shared vehicle crossing and accessway will be upgraded in accordance with the FNDC ES 2009 at Stage 1.

Stage 2

- Proposed Lots 3 and 5-6 will all gain direct access to Orira Road via individual vehicle crossings, which will be constructed in accordance with the FNDC ES 2009 at Stage 2.
- The existing dwelling and farm buildings on Lot 4 will continue the existing access arrangements direct to Orira Road. No changes are proposed.

- Proposed Lot 7 (and amalgamated lot) will gain direct access to Orira Road via the existing vehicle crossing and internal farm tracks. No changes are proposed.

3.5 Water supply arrangements

There is no public reticulated water supply infrastructure available in this location.

No changes are proposed to the existing on-site water supply arrangements associated with the existing dwellings on proposed Lots 2 and 4.

Proposed Lots 1, 3 and 5-8 will rely on an on-site water supply. These arrangements will be established by future owners at the time of applying for building consents. This will include a firefighting water supply in accordance with SNZ PAS4509:2008 (or as otherwise agreed to by Fire and Emergency NZ).

3.6 Wastewater disposal arrangements

There is no public reticulated wastewater infrastructure available in this location.

No changes are proposed to the existing on-site wastewater disposal arrangements associated with the existing dwellings on proposed Lots 2 and 4.

Proposed Lots 7 and 8 are large balance areas that will continue to be used as rural productive farms following the completion of the subdivision. Therefore, no wastewater disposal arrangements have been identified. Should a dwelling be constructed on these balance sites in the future, on-site servicing will be provided at building consent stage in accordance with the FNDC ES 2009.

The RS suitability report identifies on-site wastewater arrangements for proposed Lots 1, 3 and 5-6 that comply with the relevant statutory requirements. The arrangements will be finalised at the building consent stage when the sites are developed.

It is anticipated that the recommendations of the RS report will be encapsulated within the conditions of consent.

3.7 Stormwater disposal arrangements

No changes are proposed to the existing on-site stormwater disposal arrangements associated with the existing dwellings on proposed Lot 2 and 4.

Proposed Lots 7 and 8 will continue their uses as rural productive farms following the completion of the subdivision therefore no stormwater disposal arrangements will be provided. Should the sites be developed in future, there is sufficient room to manage stormwater runoff.

The RS suitability report provides preliminary recommendations for the management of stormwater on Lots 1, 3, and 5 – 6, which include piping water to watercourses or disposing of water via dispersal structures. The arrangements will be finalised at the building consent stage when the sites are developed.

It is anticipated that the recommendations of the RS stormwater and subdivision suitability reports will be encapsulated within the conditions of this consent.

3.8 Electricity and telecommunications

Proposed Lots 2 and 4 have an existing electricity and telecommunications connections associated with the existing dwellings.

The remaining vacant lots will not be provided with an electricity or telecommunications connection as part of this subdivision. The sites will instead rely on alternative wireless/solar options for the provision of these services.

4. RULE ASSESSMENT

4.1 Relevant planning notations

Pt Section S13 Blk VII Mangamuka SD and Pt Section 11 Blk VII Mangamuka SD are zoned RPZ while Section 71 Blk VII Mangamuka SD and Section 80 Blk VII Mangamuka SD are zoned 'General Coastal' under the FNDP.

The FNDC notified the PDP on 27 July 2022. The properties are zoned 'RPROZ' and are subject to the 'CE', HNC, Coastal Flood and River Flood Zones in this plan.

4.2 FNDP rule assessment

The justification for each of the proposed lots is provided in Section 3.3 of this report.

The proposal is a **non-complying activity** under Rule 13.11(a). *The proposed subdivision cannot comply with the maximum number of subdivided lots specified for a discretionary activity subdivision. The proposed subdivision otherwise complies with the minimum allotment size and with the assessment criteria under Rule 13.10 of the FNDP.*

Proposed Lots 7 and 8 are in accordance with the restricted discretionary activity criteria for subdivision in the General Coastal Zone under Rule 13.8.4.

4.3 PDP rule assessment

The FNDC notified on the PDP on 27 July 2022. While the rules that apply to this proposal do not currently have legal effect in accordance with s86B(3) of the RMA, they are identified below for completeness.

In this case, it is assessed that non-complying resource consent would be required under Rule SUB-R3 – '*Subdivision of land to create a new allotment*' as proposed Lots 1-6 do not comply with the minimum lot size requirements for the zone under SUB-S1. Discretionary resource consent would also be required under CE-R1 as the indicative building platforms for proposed Lots 1 and 5-6

are located within the CE where a future dwelling would not comply with the permitted standard (25m²).

Controlled activity consent would be required under SUB-R4 to create a private accessway to proposed Lots 5-6 and 3. Restricted discretionary activity consent would also be required under SUB-R11 as the proposed accessways are within the Flood Susceptible Area.

While consent is not required under the PDP, the objectives and policies are a relevant consideration under s104(1)(b)(vi) of the RMA. An assessment of the proposal in the context of these provisions is provided in section 6.2 of this report.

4.4 Overall activity status

The proposal is a **non-complying activity** overall.

5. ASSESSMENT OF ENVIRONMENTAL EFFECTS

5.1 Existing environment

Section 104(1)(a) of the RMA requires a consideration of any actual and potential effects on the environment of allowing an activity. The existing environment has been described in Section 2 of this report.

5.2 Permitted baseline

Section 104(2) of the RMA allows a consent authority to disregard any adverse effects of an activity on the environment if a plan (the FNDP in this instance) permits an activity with that effect. While there is no permitted baseline for subdivision, it is permitted to construct one dwelling per 12ha on the existing titles (NA75B/113 and NA42B/990).

5.3 Effects on rural production values

The proposal seeks to rationalise the land by creating smaller records of title in appropriate locations to be used for rural residential use, while the existing farms will be contained within two balance lots. The balance lots are of a size which is suitable for a wide range of rural production activities. This will allow the properties to continue the farming use and will prevent the fragmentation of rural productive land, ensuring that arable land is not lost.

Overall, the adverse effects on productive values will be less than minor.

5.4 Effects on significant indigenous flora and fauna

The PNAP area identified by the FNDP is wholly contained within one of the balance sites (Lot 8) and will not be subject to any fragmentation. In addition to this, no native vegetation will be removed to facilitate the completion of this subdivision.

As such, any effects on indigenous flora and fauna will be negligible.

5.5 Fire hazards

The proposed subdivision will not have any adverse effects relating to fire hazards as any future dwellings on the proposed lots will be well setback from existing vegetation.

5.6 Access effects

The proposed subdivision will result in all of the proposed lots being provided with safe and efficient access arrangements. Specifically, the proposed lots either have existing access arrangements, or the access arrangements will be staged and constructed in accordance with the relevant FNDC requirements

5.7 Servicing effects

No changes are proposed to the servicing arrangements associated with the existing dwellings and farm buildings on Lots 2, 4 and 8.

Compliance with the recommendations of the RS report will ensure that any adverse effects associated with the onsite servicing of proposed Lots 1, 3-6 will be avoided or remedied to be less than minor. This will be guaranteed via the registration of appropriately worded conditions of consent.

Accordingly, any effects associated with servicing will be less than minor.

5.8 Adverse effects conclusion

Overall, the effects associated with this proposal will be less than minor.

6. PLANNING ASSESSMENT

6.1 FNDP objectives and policies assessment

The objectives and policies of the FNDP are zone specific. In addition, there are other provisions that relate to district wide matters. Given the nature of this application, this assessment considers the objectives and policies in Chapter 8 'Rural Environment' and Chapter 13 'Subdivision'.

Chapter 8 – Rural Environment

8.3.2 *To ensure that the life supporting capacity of soils is not compromised by inappropriate subdivision, use or development.*

8.3.7 *To promote the maintenance and enhancement of amenity values of the rural environment to a level that is consistent with the productive intent of the zone.*

8.3.9 *To enable rural production activities to be undertaken in the rural environment.*

8.3.10 *To enable the activities compatible with the amenity values of rural areas and rural production activities to establish in the rural environment.*

8.4.1 *That activities which will contribute to the sustainable management of the natural and physical resources of the rural environment are enabled to locate in that environment.'*

The rural production values of the subject sites will be maintained as the subdivision has been designed to directly support production activities, these being rural productive farms (Lots 7 and 8). These lots will continue to undertake rural production activities such as livestock grazing. As such, the subdivision will improve the productive capacity of the land.

Chapter 13 – Subdivision

The relevant objectives and policies of Chapter 13 are assessed below.

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

Objective 13.3.2 *To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly from subdivision,*

including reverse sensitivity effects and the creation or acceleration of natural hazards, are avoided, remedied or mitigated.

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

Policy 13.4.1 *That the sizes, dimensions and distribution of allotments created through the subdivision process be determined with regard to the potential effects including cumulative effects, of the use of those allotments on:*

(a) natural character, particularly of the coastal environment;
(b) ecological values;
(c) landscape values;
(d) amenity values;
(e) cultural values;
(f) heritage values; and
(g) existing land uses.

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

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

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

The proposed lots are consistent with the purpose of the Rural Zone as addressed in the assessment of the objectives and policies of Chapter 8 above. The adverse effects associated with the proposal will be less than minor as detailed in Section 5 of this report.

The proposed lots will either retain the onsite services associated with the existing dwellings and farm buildings or will be provided with onsite services in accordance with the RS report.

The proposed lots will either retain the existing access arrangements or will be provided with vehicle crossings in accordance with the FNDC ES 2009.

Conclusion

Overall, the proposal is not contrary to the objectives and policies of the FNDP.

6.2 PDP objectives and policies assessment

The following PDP objectives and policies are particularly relevant to this proposal:

Subdivision chapter

SUB-P8 *Avoid rural lifestyle subdivision in the Rural Production zone unless the subdivision:*

a. will protect a qualifying SNA in perpetuity and result in the SNA being added to the District Plan SNA schedule; and

b. will not result in the loss of versatile soils for primary production activities.

There are a number of objectives and policies from the Subdivision chapter of the PDP that are of some relevance to the proposal. However, SUB-P8 is of particular relevance.

SUB-P8 requires that rural residential subdivision is avoided in the RPZ unless undertaken in accordance with the environmental benefit subdivision clauses. Given that the proposal seeks to create six rural-residential lots and does not propose the protection of any natural features, the proposal does not align with this policy.

While some support can be drawn from other objectives and policies, the proposal is contrary to the objectives and policies from the Subdivision chapter of the PDP for this reason.

RPROZ Chapter

RPROZ-O1 - The Rural Production zone is managed to ensure its availability for primary production activities and its long-term protection for current and future generations.

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

RPROZ-P2 - Ensure the Rural Production zone provides for activities that require a rural location by:

1. enabling primary production activities as the predominant land use;

2. *enabling a range of compatible activities that support primary production activities, including ancillary activities, rural produce manufacturing, rural produce retail, visitor accommodation and home businesses.*

RPROZ-P5 - Avoid land use that:

a) is incompatible with the purpose, character and amenity of the Rural Production zone;

b) does not have a functional need to locate in the Rural Production zone and is more appropriately located in another zone;

c) would result in the loss of productive capacity of highly productive land;

d) would exacerbate natural hazards; and

e) cannot provide appropriate on-site infrastructure.

Assessment

It has been determined that the proposal would be a non-complying activity if the provisions of this zone were to have legal effect. The subdivision is not contrary to the objectives and policies of the RPROZ as the rural farmland will be held within the balance lots (Lots 7-8) and will continue their rural productive use. This will ensure that there is no loss of rural productive capacity.

CE Chapter

CE-O1 – The natural character of the coastal environment is identified and managed to ensure its long-term preservation and protection for current and future generations

CE-P3 – Avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of land use and subdivision on the characteristics and qualities of the coastal environment not identified as:

a. outstanding natural character;

b. ONL;

c. ONF.

The proposed subdivision is supported by the objectives and policies of the CE as the proposed development will be of a scale that is sympathetic to the coastal area and the existing features.

Furthermore, the indicated building platforms are not within any of the identified areas listed under CE-P3.

6.3 Weighting assessment – Operative and Proposed Far North District Plan

Given the range of submissions received and that the PDP is in the very early stages of the plan change process, there is considerable scope for the relevant rules and associated objectives and policies to change. For these reasons, considerably more weight should be applied to the provisions of the FNDP when considering the proposal under s104 of the RMA – very limited weight should be applied to the PDP.

6.4 NPS – Indigenous biodiversity

The NPS-IB came into effect on 4 August 2023. It contains specific requirements relating to indigenous biodiversity within terrestrial Significant Natural Areas (SNAs).

The subdivision is consistent with Section 3.10 of the NPS-IB as there will be no adverse effect on an SNA as a result of the subdivision. Specifically, the subdivision will not result in the fragmentation of an SNA as the balance site (Lot 8) will wholly contain the indigenous vegetation that is subject to a PNA.

Furthermore, the residential lots (Lots 1 and 3-6) have been positioned on vacant areas of pasture with building sites positioned in locations which avoid the existing vegetation. As such, no indigenous vegetation will be required to be removed when the sites are developed for residential use following the completion of the subdivision.

Considering the above, the proposal will not result in the loss or disruption of any ecosystem. Accordingly, the proposal is consistent with the policy direction set out in the NPS-IB.

6.5 NES – Soil Contamination

All applications that involve subdivision, an activity that changes the use of a piece of land, or earthworks are subject to the provisions of the National Environmental Standard for Assessing and Managing Contaminants in Soil to

Protect Human Health Regulations 2011 (NES). The regulation sets out the requirements for considering the potential for soil contamination, based on the HAIL (Hazardous Activities and Industries List) and the risk that this may pose to human health as a result of the proposed land use.

A review of aerial photographs and the Northland Regional Council 'selected land-use sites' database was undertaken, which confirmed that no HAIL activities are present or have ever taken place on the subject 'piece of land' - refer to the map attached in **Appendix 4**. The NES-SC is therefore not relevant to the proposed subdivision.

6.6 NPS – Highly Productive Land

The National Policy Statement for Highly Productive Land (NPS-HPL) aims to ensure the availability New Zealand's most favourable soils for food and fibre production, now and for future generations.

The NPS-HPL is not relevant to the proposal as the soils at the site have a LUC classification of 6.

6.7 S104D – "Gateway" tests

S104D(1)(a) of the RMA – effects

In accordance with the conclusions reached in section 5 of this report, any adverse effects associated with the proposed subdivision will be less than minor. Accordingly, the subdivision passes the gateway test in s104D(1)(a) of the RMA.

S104D(1)(b) of the RMA – objectives and policies

In accordance with section 6.1 of this report, the proposal is not contrary to the intent (objectives and policies) of the FNDP. The proposed subdivision, therefore, passes the gateway test in s104D(1)(b) of the RMA.

6.8 Part 2 assessment

An assessment of Part 2 matters is not required unless there are issues of invalidity, incomplete coverage, or uncertainty in the planning provisions.[1] In this case, there is no invalidity, incomplete coverage, or uncertainty amongst the various documents. In that regard, no assessment of the application is required under Part 2.

[1] *R J Davidson Family Trust the Marlborough District Council* [2018] NZCA 316

7. NOTIFICATION

Pursuant to sections 95A and 95B of the RMA, Section 5 of this report concludes that any adverse effects associated with the proposal will be less than minor. Furthermore, there are no special circumstances associated with the application, the applicant has not requested notification, and there is no rule or national environmental standard that requires notification of this application. Consequentially, public notification is not necessary.

The assessment of environmental effects in Section 5 of this report confirms that no parties are considered to be adversely affected by the proposal. Consequentially, limited notification is not necessary.

Having considered the above, the proposal can proceed on a non-notified basis.

8. CONCLUSION

The proposal seeks to undertake an eight-lot subdivision of two existing titles over two stages at 229 and 290 Orira Road, Umawera.

The proposal requires consent as a non-complying activity under the provisions of the FNDP.

The environmental effects associated with the proposal (confined to the matters for discretion) have been assessed in Section 5 of this report. Overall, the effects have been determined to be less than minor. Consequently, appropriate regard has been given to s104(1)(a) of the RMA.

The proposal is consistent with the objectives and policies of the RPZ, General Coastal Zone and the district wide Chapter 13 'Subdivision' in the OFNDP and the objectives and policies of the RPROZ and the CE of the PDP. Section 6.3 confirms that the proposal is consistent with the policy direction of the NPS-IB. Sections 6.4 and 6.5 confirm that the NES-SC and the NPS-HPL are not a relevant consideration for the proposed subdivision. Accordingly, appropriate regard has been given to s104(1)(b)(i) and s104(1)(b)(vi) of the RMA.

Having regard to the matters outlined in sections 104D and 104(1) of the RMA, the proposal can be granted resource consent subject to appropriate conditions of consent.

APPENDIX 1

RECORDS OF TITLE AND MEMORIALS

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier **NA42B/990**

Land Registration District **North Auckland**

Date Issued 10 November 1978

Prior References

NA422/20 NA42C/519

Estate Fee Simple

Area 39.8693 hectares more or less

Legal Description Section 71 and Part Section 11 Block VII Mangamuka Survey District

Registered Owners

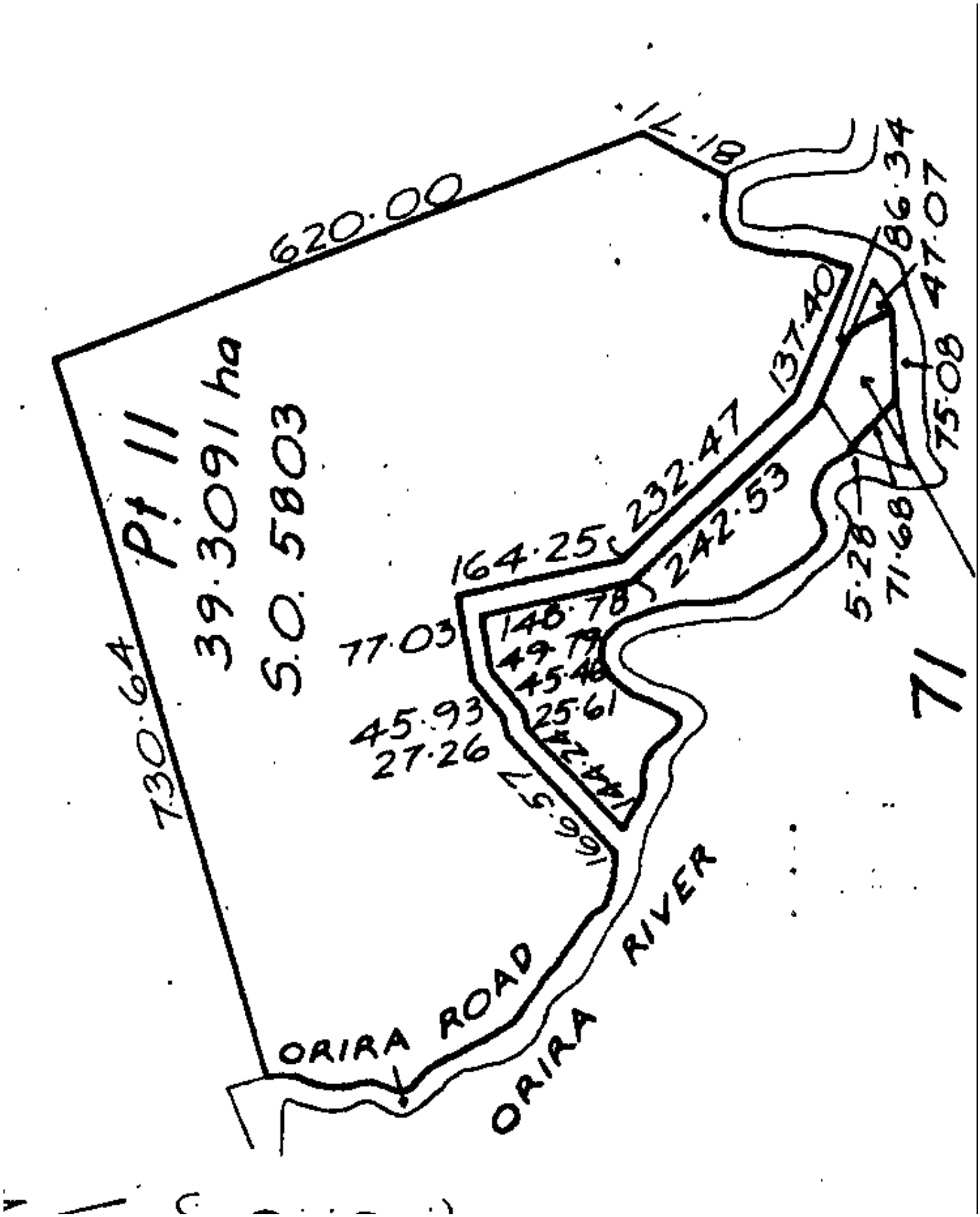
Mark Gordon Zeilstra and CHD Trustees No. 91 Limited

Interests

Subject to Section 168A Coal Mines Act 1925 (affects Section 71 Block VII Mangamuka Survey District)

Subject to Section 8 Mining Act 1971 (affects Section 71 Block VII Mangamuka Survey District)

12107276.3 Mortgage to ANZ Bank New Zealand Limited - 1.6.2021 at 4:35 pm


620.00
1.18
86.34
47.07
137.40
75.08
232.47
242.53
164.25
71.68
5.28
77.03
148.78
49.79
45.48
25.61
45.93
27.26
144.24
166.57
730.64
Pt 11
39.3091 ha
S.O. 5803
71
ORIRA ROAD
ORIRA RIVER

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier **NA75B/113**

Part-Cancelled

Land Registration District **North Auckland**

Date Issued 08 March 1989

Prior References
NA42A/1095

Estate	Fee Simple
Area	55.3897 hectares more or less
Legal Description	Section 80 Block VII Mangamuka Survey District and Part Southern Part Section 13 Block VII Mangamuka Survey District

Registered Owners

Mark Gordon Zeilstra, Pauline Diamond and CHD Trustees (Diamondz) Limited

---

Interests

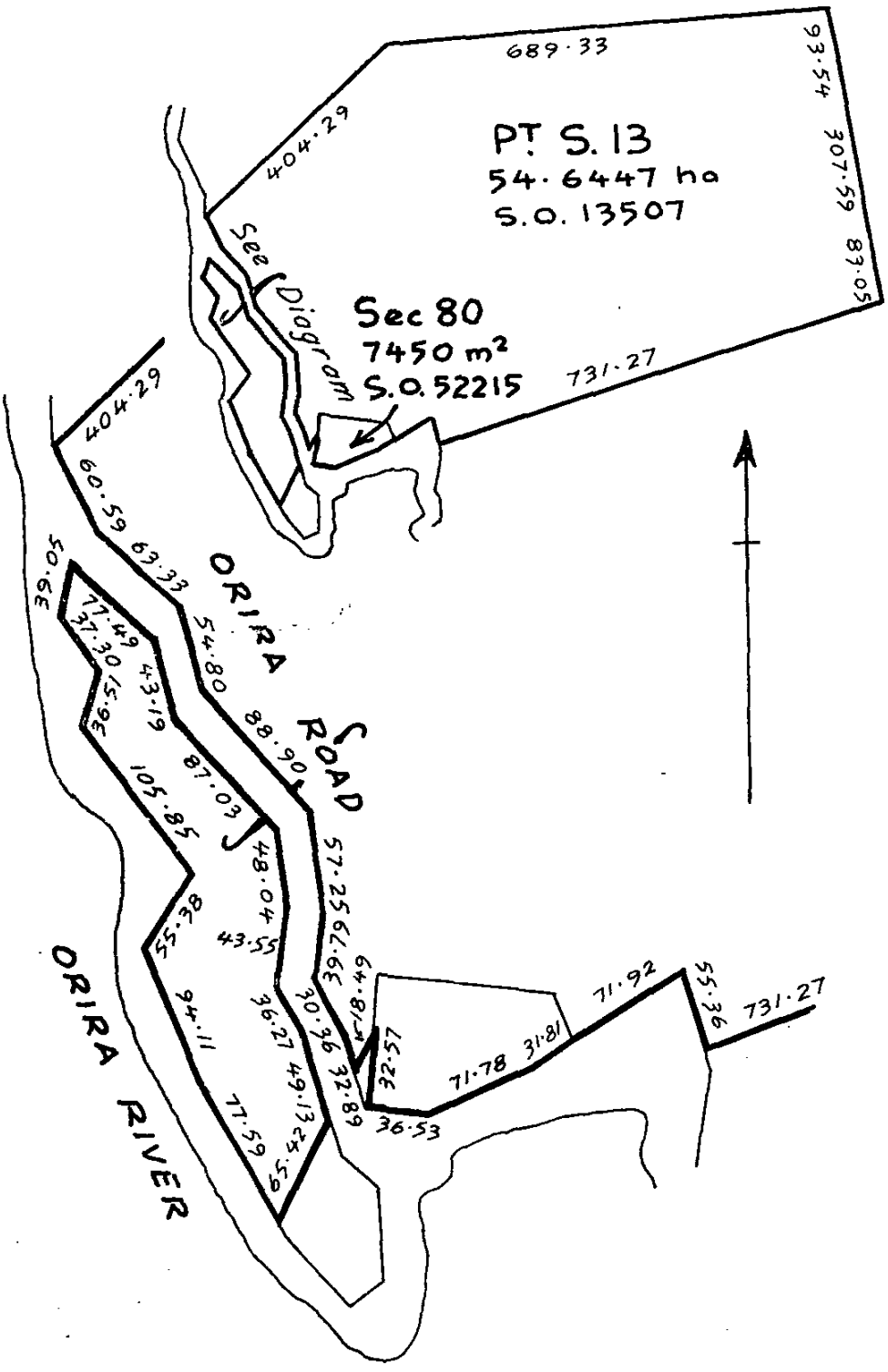
Subject to Section 8 Mining Act 1971 (Affects Section 80)

Subject to Section 168A Coal Mines Act 1925 (Affects Section 80)

C038170.2 CT NA78A/843 issued for Lot 1 DP 132729 - 6.9.1989 at 2:54 pm

11091674.3 Mortgage to ANZ Bank New Zealand Limited - 20.4.2018 at 4:39 pm

HOKIANGA COUNTY

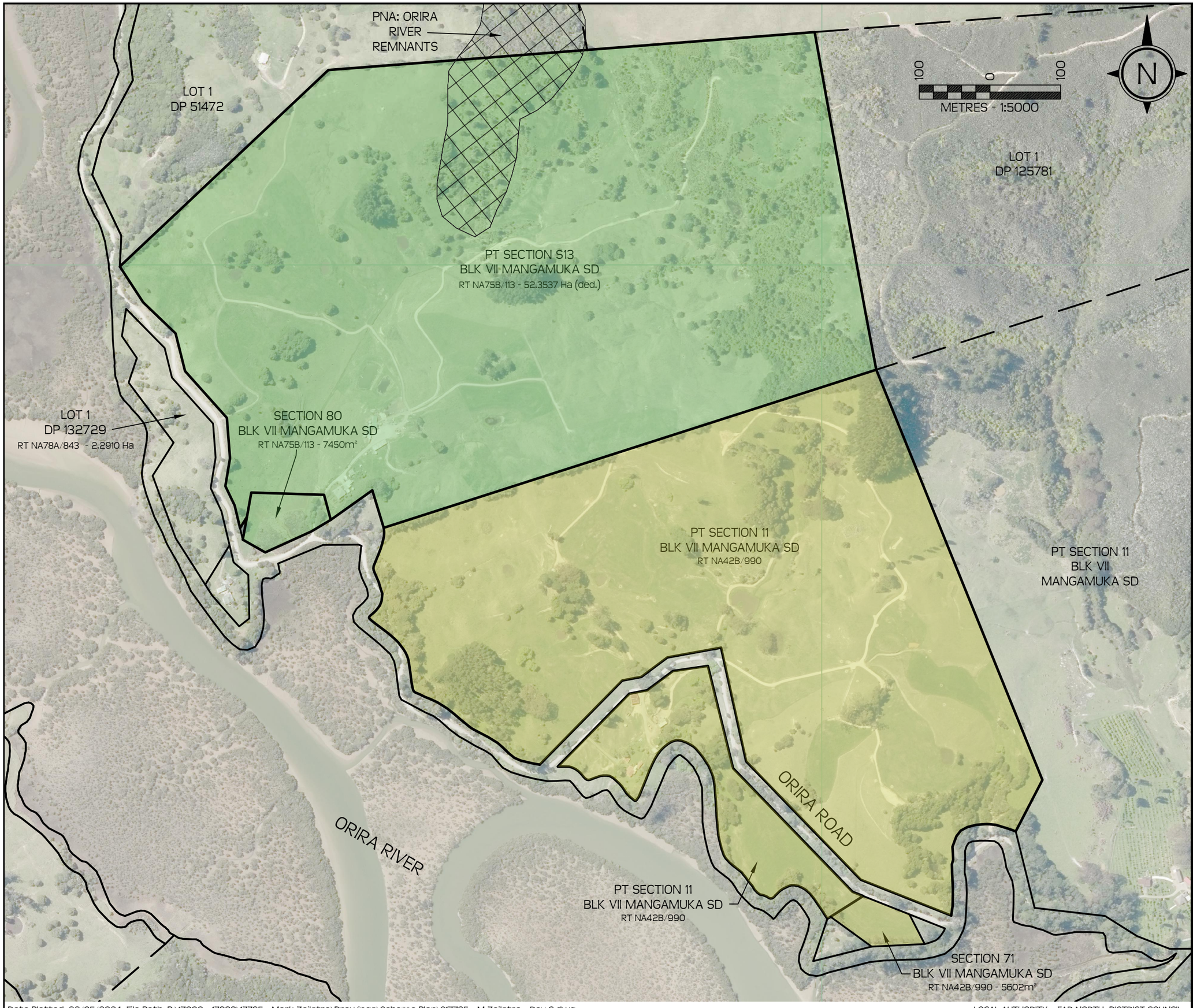


TOTAL AREA: 55·3897 ha.

NSC WH.

APPENDIX 2

SUBDIVISION SCHEME PLAN



CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6. THIS PLAN IS COPYRIGHT TO REYBURN & BRYANT (1999) LIMITED.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 04m 2014-2016 RURAL AERIAL SOURCED FROM AERIAL SURVEYS LTD INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

KEY:

RT NA75B/113: 53.0987 Ha

RT NA42B/990: 39.8693 Ha

TITLE AREA: 95.2590 Ha
SUBD'N AREA: 92.4078 Ha
COMPRISED IN: PT RT NA42B/990 & NA75B/113

NOTE: SUBD'N AREA EXCLUDES LOT 1 DP 132729 (INCLUDED IN RT NA75B/113 AREA) & SEC 71 BLK VII MANGAMUKA SD (PT RT NA42B/990)

BUILDING SETBACKS:

RURAL PRODUCTION ZONE: NO BUILDING WITHIN 10m OF ANY BOUNDARY, EXCEPT THAT NO ACCESSORY BUILDINGS SHALL BE ERECTED WITHIN 3m OF BOUNDARIES OTHER THAN ROAD BOUNDARIES, ON SITES LESS THAN 5000m² AND NO CROP PROTECTION STRUCTURES SHALL BE LOCATED WITHIN 3m OF BOUNDARIES.

GENERAL COASTAL ZONE: NO BUILDING WITHIN 10m OF ANY SITE BOUNDARY EXCEPT THAT ON SITES LESS THAN 5000m² THE SETBACK IS 3m FROM ANY BOUNDARY.

REV	DATE	DESCRIPTION
G	22.05.24	CHANGE LOT 3 BOUNDARY - JM/PD
F	8.04.24	SHOW GEN. COASTAL ZONE & AMEND - JM/PD
A	14-09-23	FIRST ISSUE - JM/TM

REF. DATA:

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

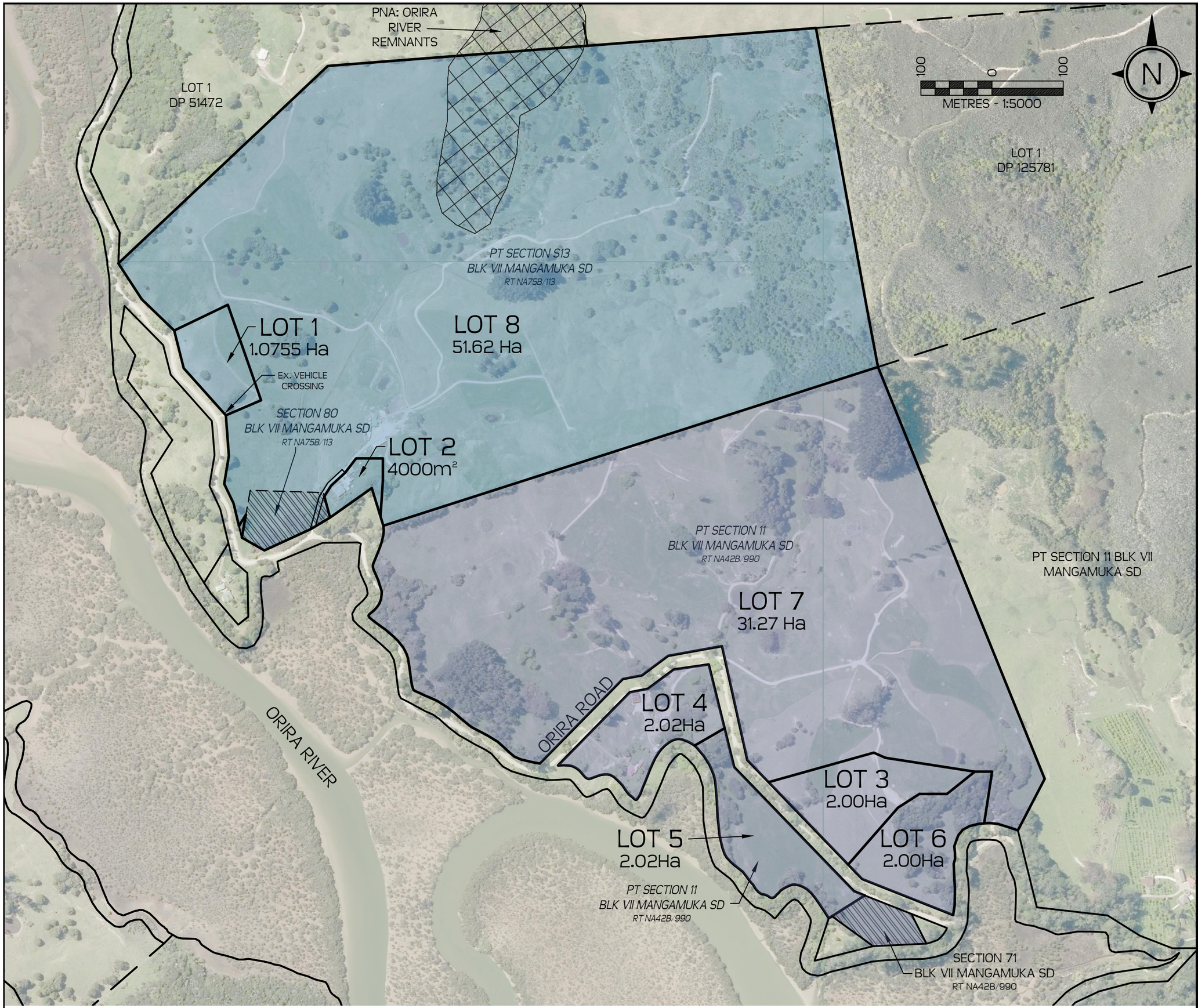
CLIENT

MARK ZEILSTRA
290 ORIRA ROAD, UMAWERA,
KOHUKOHU, NORTHLAND

TITLE

CURRENT TITLE SITUATION PROPOSED SUBDIVISION OF PT SECTIONS 11 & S13 AND SECTIONS 71 & 80 BLK VII MANGAMUKA SD

DATE	MAY 2024	SCALE	1:5000 @A3	
NO.	S17765	SHEET	1/4	Rev. G



CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6. THIS PLAN IS COPYRIGHT TO REYBURN & BRYANT (1999) LIMITED.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 04m 2014-2016 RURAL AERIAL SOURCED FROM AERIAL SURVEYS LTD INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

KEY:

- STAGE 1
- STAGE 2
- GENERAL COASTAL ZONE (REMAINING AREAS ARE RURAL PRODUCTION ZONE)

SEE SHEET 03 OF 04 FOR EASEMENT DETAILS

TITLE AREA: 95.2590 Ha
SUBD'N AREA: 92.4078 Ha
COMPRISED IN: PT RT NA42B/990 & NA75B/113

NOTE: SUBD'N AREA EXCLUDES LOT 1 DP 132729 (INCLUDED IN RT NA75B/113 AREA) & SEC 71 BLK VII MANGAMUKA SD (PT RT NA42B/990)

BUILDING SETBACKS:

RURAL PRODUCTION ZONE: NO BUILDING WITHIN 10m OF ANY BOUNDARY, EXCEPT THAT NO ACCESSORY BUILDINGS SHALL BE ERECTED WITHIN 3m OF BOUNDARIES OTHER THAN ROAD BOUNDARIES, ON SITES LESS THAN 5000m² AND NO CROP PROTECTION STRUCTURES SHALL BE LOCATED WITHIN 3m OF BOUNDARIES.

GENERAL COASTAL ZONE: NO BUILDING WITHIN 10m OF ANY SITE BOUNDARY EXCEPT THAT ON SITES LESS THAN 5000m² THE SETBACK IS 3m FROM ANY BOUNDARY.

REV	DATE	DESCRIPTION
G	22.05.24	CHANGE LOT 3 BOUNDARY - JM/PD
F	8.04.24	SHOW GEN. COASTAL ZONE & AMEND - JM/PD
A	14-09-23	FIRST ISSUE - JM/TM

REF. DATA:

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

CLIENT

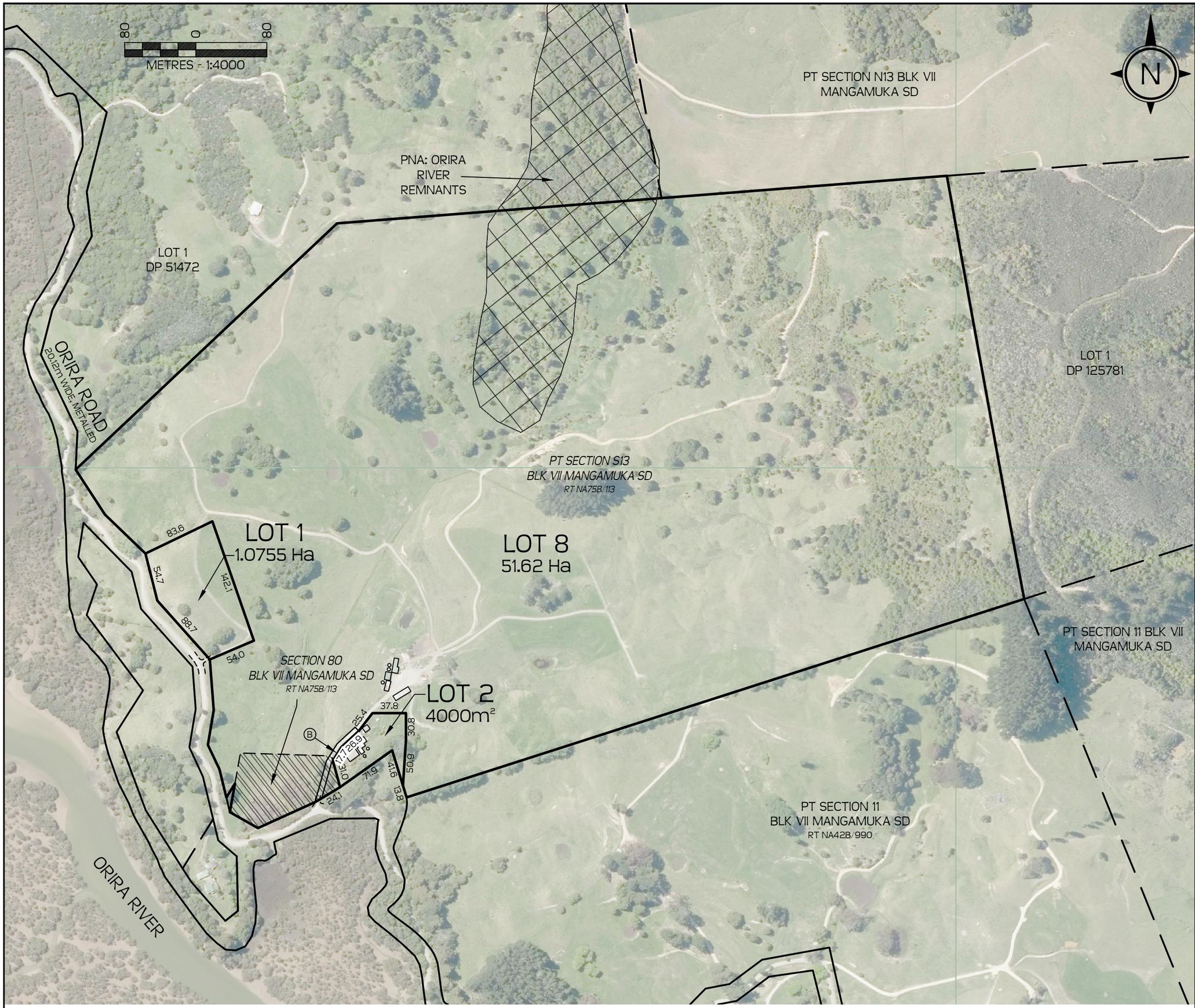
MARK ZEILSTRA
290 ORIRA ROAD, UMAWERA,
KOHUKOHU, NORTHLAND

TITLE

OVERALL PROPOSED SUBDIVISION OF SECTION S13 & PT SECTION 11 BLK VII MANGAMUKA SD

DATE	MAY 2024	SCALE	1:5000 @A3	
NO.	S17765	SHEET	2/4	Rev. G

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL



CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6. THIS PLAN IS COPYRIGHT TO REYBURN & BRYANT (1999) LIMITED.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 04m 2014-2016 RURAL AERIAL SOURCED FROM AERIAL SURVEYS LTD INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

PROPOSED EASEMENT SCHEDULE

PURPOSE	SHOWN	BURDENED (SERV.TENE.)	BENEFITTED (DOM.TENE.)
RIGHT OF WAY	(B)	LOT 8 HEREON	LOT 2 HEREON

KEY:

GENERAL COASTAL ZONE (REMAINING AREAS ARE RURAL PRODUCTION ZONE)

TITLE AREA: 95.2590 Ha
SUBD'N AREA: 92.4078 Ha
COMPRISED IN: PT RT NA42B/990 & NA75B/113

NOTE: SUBD'N AREA EXCLUDES LOT 1 DP 132729 (INCLUDED IN RT NA75B/113 AREA) & SEC 71 BLK VII MANGAMUKA SD (PT RT NA42B/990)

BUILDING SETBACKS:

RURAL PRODUCTION ZONE: NO BUILDING WITHIN 10m OF ANY BOUNDARY, EXCEPT THAT NO ACCESSORY BUILDINGS SHALL BE ERECTED WITHIN 3m OF BOUNDARIES OTHER THAN ROAD BOUNDARIES, ON SITES LESS THAN 5000m² AND NO CROP PROTECTION STRUCTURES SHALL BE LOCATED WITHIN 3m OF BOUNDARIES.

GENERAL COASTAL ZONE: NO BUILDING WITHIN 10m OF ANY SITE BOUNDARY EXCEPT THAT ON SITES LESS THAN 5000m² THE SETBACK IS 3m FROM ANY BOUNDARY.

REV	DATE	DESCRIPTION
G	22.05.24	CHANGE LOT 3 BOUNDARY - JM/PD
F	8.04.24	SHOW GEN. COASTAL ZONE & AMEND - JM/PD
A	14-09-23	FIRST ISSUE - JM/TM

REF. DATA:

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

CLIENT

MARK ZEILSTRA
290 ORIRA ROAD, UMAWERA,
KOHUKOHU, NORTHLAND

TITLE

STAGE 1
PROPOSED SUBDIVISION OF PT SECTION S13 & SECTION 80 BLK VII MANGAMUKA SD

DATE	MAY 2024	SCALE	1:4000 @A3
NO.	S17765	SHEET	3/4 Rev. G

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

60 0 60
METRES - 1:3000

N

LOT 8
STAGE 1

LOT 2
STAGE 1

PT SECTION 11 BLK VII
MANGAMUKA SD

PT SECTION 11
BLK VII MANGAMUKA SD
RT NA42B/990

LOT 7
31.27 Ha

LOT 4
2.02Ha

92.6
(148.8)
48.5
56.2
43.0
153.6
17.9
127.1
24.4
50.1
38.8
35.7
73.5
(232.5)
161.1
106.3
28.5
137.4

LOT 3
2.00Ha

LOT 5
2.02Ha

LOT 6
2.00Ha

ORIRA ROAD
20.12m WIDE, METALLED

HOUSE SITE

HOUSE SITE

ORIRA RIVER

PT SECTION 11
BLK VII MANGAMUKA SD
RT NA42B/990

Sec 70 Blk VII
Mangamuka SD
CLOSED CEMETERY
NZGZ 1977 p 3102

SECTION 71 BLK VII
MANGAMUKA SD
RT NA42B/990 | 5602m²

CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6. THIS PLAN IS COPYRIGHT TO REYBURN & BRYANT (1999) LIMITED.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 04m 2014-2016 RURAL AERIAL SOURCED FROM AERIAL SURVEYS LTD INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

PROPOSED AMALGAMATION:

PURSUANT TO SECTION 220 (1)(b)(ii) OF THE RMA 1991
THAT LOT 7 HEREON AND SECTION 71 BLK VII MANGAMUKA SD (RESIDUE RT NA42B/990) BE HELD IN THE SAME RECORD OF TITLE.

KEY:

GENERAL COASTAL ZONE (REMAINING AREAS ARE RURAL PRODUCTION ZONE)

TITLE AREA: 95.2590 Ha
SUBD'N AREA: 92.4078 Ha
COMPRISED IN: PT RT NA42B/990 & NA75B/113

NOTE: SUBD'N AREA EXCLUDES LOT 1 DP 132729 (INCLUDED IN RT NA75B/113 AREA) & SEC 71 BLK VII MANGAMUKA SD (PT RT NA42B/990)

BUILDING SETBACKS:

RURAL PRODUCTION ZONE: NO BUILDING WITHIN 10m OF ANY BOUNDARY, EXCEPT THAT NO ACCESSORY BUILDINGS SHALL BE ERECTED WITHIN 3m OF BOUNDARIES OTHER THAN ROAD BOUNDARIES, ON SITES LESS THAN 5000m² AND NO CROP PROTECTION STRUCTURES SHALL BE LOCATED WITHIN 3m OF BOUNDARIES.

GENERAL COASTAL ZONE: NO BUILDING WITHIN 10m OF ANY SITE BOUNDARY EXCEPT THAT ON SITES LESS THAN 5000m² THE SETBACK IS 3m FROM ANY BOUNDARY.

REV	DATE	DESCRIPTION
G	22.05.24	CHANGE LOT 3 BOUNDARY - JM/PD
F	8.04.24	SHOW GEN. COASTAL ZONE & AMEND - JM/PD
A	14-09-23	FIRST ISSUE - JM/TM

REF. DATA:

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

CLIENT

MARK ZEILSTRA
290 ORIRA ROAD, UMAWERA,
KOHUKOHU, NORTHLAND

TITLE

STAGE 2
PROPOSED SUBDIVISION OF SECTION 71 & PT SECTION 11 BLK VII MANGAMUKA SD

DATE	MAY 2024	SCALE	1:3000 @A3	
NO.	S17765	SHEET	4/4	Rev. G

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

PNA: ORIRA RIVER REMNANTS

LOT 1
DP 51472

PT SECTION S13
BLK VII MANGAMUKA SD
RT NA75B/113 - 52.3537 Ha (ded.)

100 0 100
METRES - 1:5000

N

LOT 1
DP 125781

LOT 1
DP 132729
RT NA78A/843 - 2.2910 Ha

SECTION 80
BLK VII MANGAMUKA SD
RT NA75B/113 - 7450m²

PT SECTION 11
BLK VII MANGAMUKA SD
RT NA42B/990

PT SECTION 11
BLK VII
MANGAMUKA SD

ORIRA ROAD

ORIRA RIVER

PT SECTION 11
BLK VII MANGAMUKA SD
RT NA42B/990

SECTION 71
BLK VII MANGAMUKA SD
RT NA42B/990 - 5602m²

CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 04m 2014-2016 RURAL AERIAL SOURCED FROM AERIAL SURVEYS LTD. INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

KEY:

RT NA75B/113: 53.0987 Ha

RT NA42B/990: 39.8693 Ha

TITLE AREA: 95.2590 Ha
SUBD'N AREA: 92.4078 Ha
COMPRISED IN: PT RT NA42B/990 & NA75B/113

NOTE: SUBD'N AREA EXCLUDES LOT 1 DP 132729 (INCLUDED IN RT NA75B/113 AREA) & SEC 71 BLK VII MANGAMUKA SD (PT RT NA42B/990)

BUILDING SETBACKS:

RURAL PRODUCTION ZONE: NO BUILDING WITHIN 10m OF ANY BOUNDARY, EXCEPT THAT NO ACCESSORY BUILDINGS SHALL BE ERECTED WITHIN 3m OF BOUNDARIES OTHER THAN ROAD BOUNDARIES, ON SITES LESS THAN 5000m² AND NO CROP PROTECTION STRUCTURES SHALL BE LOCATED WITHIN 3m OF BOUNDARIES.

GENERAL COASTAL ZONE: NO BUILDING WITHIN 10m OF ANY SITE BOUNDARY EXCEPT THAT ON SITES LESS THAN 5000m² THE SETBACK IS 3m FROM ANY BOUNDARY.

REV	DATE	DESCRIPTION
G	22.05.24	CHANGE LOT 3 BOUNDARY - JM/PD
F	8.04.24	SHOW GEN. COASTAL ZONE & AMEND - JM/PD
A	14-09-23	FIRST ISSUE - JM/TM

REF. DATA:

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

CLIENT

MARK ZEILSTRA
290 ORIRA ROAD, UMAWERA,
KOHUKOHU, NORTHLAND

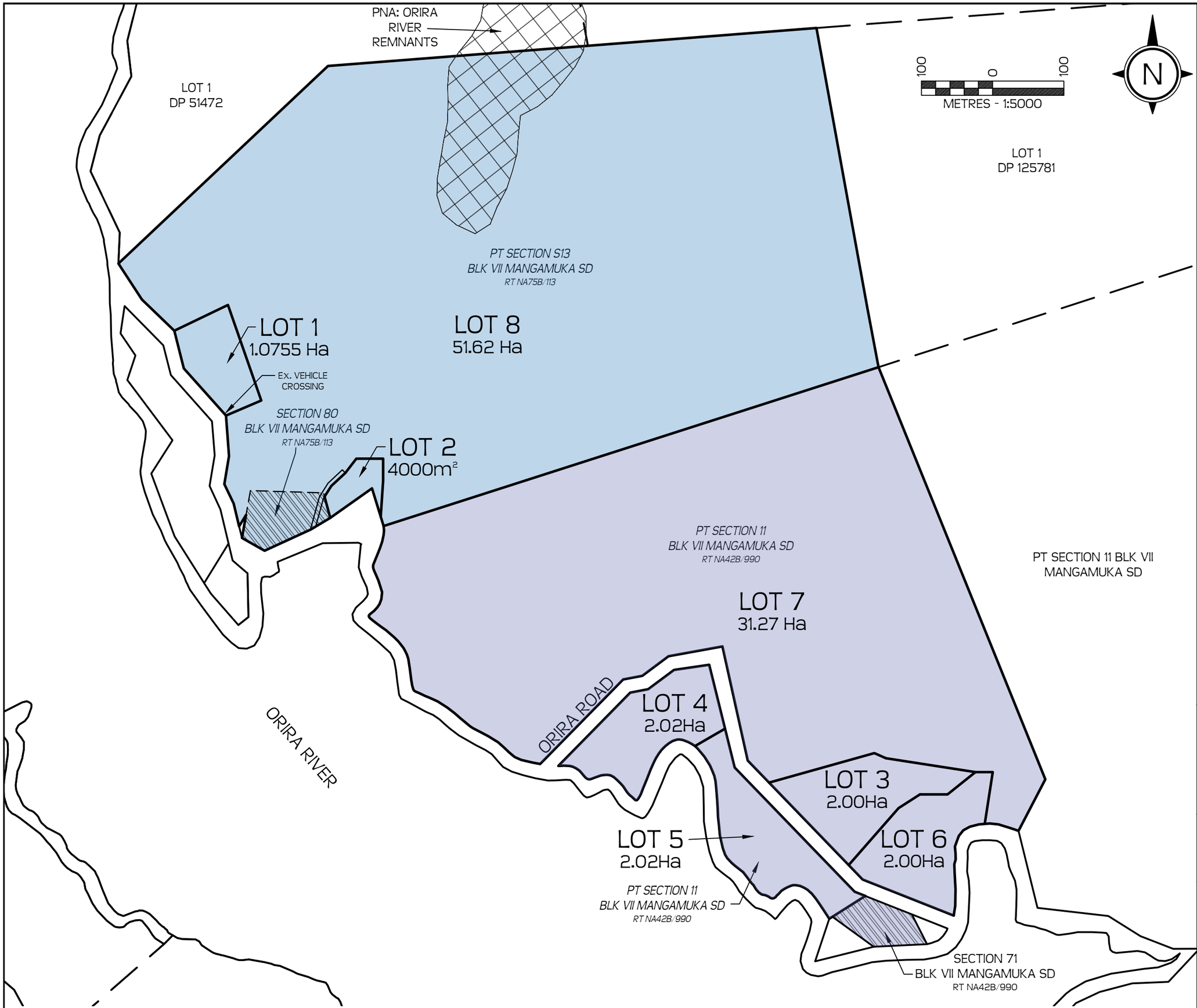
TITLE

CURRENT TITLE SITUATION PROPOSED SUBDIVISION OF PT SECTIONS 11 & S13 AND SECTIONS 71 & 80 BLK VII MANGAMUKA SD

DATE	MAY 2024	SCALE	1:5000 @A3	
NO.	S17765	SHEET	1/4	Rev. G

Date Plotted: 22/05/2024 File Path: P:\17000 - 17999\17765 - Mark Zeilstra\Drawings\Scheme Plan\S17765 - M Zeilstra - Rev G.dwg

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL



CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6. THIS PLAN IS COPYRIGHT TO REYBURN & BRYANT (1999) LIMITED.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 04m 2014-2016 RURAL AERIAL SOURCED FROM AERIAL SURVEYS LTD INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

KEY:

STAGE 1

STAGE 2

GENERAL COASTAL ZONE (REMAINING AREAS ARE RURAL PRODUCTION ZONE)

SEE SHEET 03 OF 04 FOR EASEMENT DETAILS

TITLE AREA: 95.2590 Ha
SUBD'N AREA: 92.4078 Ha
COMPRISED IN: PT RT NA42B/990 & NA75B/113

NOTE: SUBD'N AREA EXCLUDES LOT 1 DP 132729 (INCLUDED IN RT NA75B/113 AREA) & SEC 71 BLK VII MANGAMUKA SD (PT RT NA42B/990)

BUILDING SETBACKS:

RURAL PRODUCTION ZONE: NO BUILDING WITHIN 10m OF ANY BOUNDARY, EXCEPT THAT NO ACCESSORY BUILDINGS SHALL BE ERECTED WITHIN 3m OF BOUNDARIES OTHER THAN ROAD BOUNDARIES, ON SITES LESS THAN 5000m² AND NO CROP PROTECTION STRUCTURES SHALL BE LOCATED WITHIN 3m OF BOUNDARIES.

GENERAL COASTAL ZONE: NO BUILDING WITHIN 10m OF ANY SITE BOUNDARY EXCEPT THAT ON SITES LESS THAN 5000m² THE SETBACK IS 3m FROM ANY BOUNDARY.

REV	DATE	DESCRIPTION
G	22.05.24	CHANGE LOT 3 BOUNDARY - JM/PD
F	8.04.24	SHOW GEN. COASTAL ZONE & AMEND - JM/PD
A	14-09-23	FIRST ISSUE - JM/TM

REF. DATA:

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

CLIENT

MARK ZEILSTRA
290 ORIRA ROAD, UMAWERA,
KOHUKOHU, NORTHLAND

TITLE

OVERALL PROPOSED SUBDIVISION OF SECTION S13 & PT SECTION 11 BLK VII MANGAMUKA SD

DATE	MAY 2024	SCALE	1:5000 @A3
NO.	S17765	SHEET 2/4	Rev. G

Date Plotted: 22/05/2024 File Path: P:\17000 - 17999\17765 - Mark Zeilstra\Drawings\Scheme Plan\S17765 - M Zeilstra - Rev G.dwg

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

80 0 80
METRES - 1:4000

N

PT SECTION N13 BLK VII
MANGAMUKA SD

PNA: ORIRA
RIVER
REMNANTS

LOT 1
DP 51472

ORIRA ROAD
20.12m WIDE, METALLED

PT SECTION S13
BLK VII MANGAMUKA SD
RT NA75B/113

LOT 1
DP 125781

LOT 1
1.0755 Ha

LOT 8
51.62 Ha

83.6
54.7
142.1
88.7
54.0

SECTION 80
BLK VII MANGAMUKA SD
RT NA75B/113

LOT 2
4000m²

37.8
25.4
30.8
26.9
17.7
31.0
71.9
41.6
50.9
13.8
24.1

PT SECTION 11 BLK VII
MANGAMUKA SD

PT SECTION 11
BLK VII MANGAMUKA SD
RT NA42B/990

ORIRA RIVER

CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6. THIS PLAN IS COPYRIGHT TO REYBURN & BRYANT (1999) LIMITED.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 04m 2014-2016 RURAL AERIAL SOURCED FROM AERIAL SURVEYS LTD INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

PROPOSED EASEMENT SCHEDULE

PURPOSE	SHOWN	BURDENED (SERV.TENE.)	BENEFITTED (DOM.TENE.)
RIGHT OF WAY	(B)	LOT 8 HEREON	LOT 2 HEREON

KEY:

GENERAL COASTAL ZONE (REMAINING AREAS ARE RURAL PRODUCTION ZONE)

TITLE AREA: 95.2590 Ha
SUBD'N AREA: 92.4078 Ha
COMPRISED IN: PT RT NA42B/990 & NA75B/113

NOTE: SUBD'N AREA EXCLUDES LOT 1 DP 132729 (INCLUDED IN RT NA75B/113 AREA) & SEC 71 BLK VII MANGAMUKA SD (PT RT NA42B/990)

BUILDING SETBACKS:

RURAL PRODUCTION ZONE: NO BUILDING WITHIN 10m OF ANY BOUNDARY, EXCEPT THAT NO ACCESSORY BUILDINGS SHALL BE ERECTED WITHIN 3m OF BOUNDARIES OTHER THAN ROAD BOUNDARIES, ON SITES LESS THAN 5000m² AND NO CROP PROTECTION STRUCTURES SHALL BE LOCATED WITHIN 3m OF BOUNDARIES.

GENERAL COASTAL ZONE: NO BUILDING WITHIN 10m OF ANY SITE BOUNDARY EXCEPT THAT ON SITES LESS THAN 5000m² THE SETBACK IS 3m FROM ANY BOUNDARY.

REV	DATE	DESCRIPTION
G	22.05.24	CHANGE LOT 3 BOUNDARY - JM/PD
F	8.04.24	SHOW GEN. COASTAL ZONE & AMEND - JM/PD
A	14-09-23	FIRST ISSUE - JM/TM

REF. DATA:

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

CLIENT

MARK ZEILSTRA
290 ORIRA ROAD, UMAWERA,
KOHUKOHU, NORTHLAND

TITLE

STAGE 1
PROPOSED SUBDIVISION OF PT SECTION S13 & SECTION 80 BLK VII MANGAMUKA SD

DATE	MAY 2024	SCALE	1:4000 @A3	
NO.	S17765	SHEET	3/4	Rev. G

Date Plotted: 22/05/2024 File Path: P:\17000 - 17999\17765 - Mark Zeilstra\Drawings\Scheme Plan\S17765 - M Zeilstra - Rev G.dwg

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

60 0 60
METRES - 1:3000

N

LOT 8
STAGE 1

LOT 2
STAGE 1

PT SECTION 11 BLK VII
MANGAMUKA SD

PT SECTION 11
BLK VII MANGAMUKA SD
RT NA42B/990

LOT 7
31.27 Ha

LOT 4
2.02Ha

92.6
(148.8)
48.5
56.2
43.0

LOT 3
2.00Ha

153.6
17.9
127.1
24.4
50.1
38.8
35.7
73.5

LOT 5
2.02Ha

HOUSE SITE

(232.5)
161.1

ORIRA ROAD
20.12m WIDE, METALLED

LOT 6
2.00Ha

106.3
28.5
137.4

HOUSE SITE

ORIRA RIVER

PT SECTION 11
BLK VII MANGAMUKA SD
RT NA42B/990

Sec 70 Blk VII
Mangamuka SD
CLOSED CEMETERY
NZGZ 1977 p 3102

SECTION 71 BLK VII
MANGAMUKA SD
RT NA42B/990 | 5602m²

CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6. THIS PLAN IS COPYRIGHT TO REYBURN & BRYANT (1999) LIMITED.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 04m 2014-2016 RURAL AERIAL SOURCED FROM AERIAL SURVEYS LTD. INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

PROPOSED AMALGAMATION:

PURSUANT TO SECTION 220 (1)(b)(ii) OF THE RMA 1991
THAT LOT 7 HEREON AND SECTION 71 BLK VII MANGAMUKA SD (RESIDUE RT NA42B/990) BE HELD IN THE SAME RECORD OF TITLE.

KEY:

GENERAL COASTAL ZONE (REMAINING AREAS ARE RURAL PRODUCTION ZONE)

TITLE AREA: 95.2590 Ha
SUBD'N AREA: 92.4078 Ha
COMPRISED IN: PT RT NA42B/990 & NA75B/113

NOTE: SUBD'N AREA EXCLUDES LOT 1 DP 132729 (INCLUDED IN RT NA75B/113 AREA) & SEC 71 BLK VII MANGAMUKA SD (PT RT NA42B/990)

BUILDING SETBACKS:

RURAL PRODUCTION ZONE: NO BUILDING WITHIN 10m OF ANY BOUNDARY, EXCEPT THAT NO ACCESSORY BUILDINGS SHALL BE ERECTED WITHIN 3m OF BOUNDARIES OTHER THAN ROAD BOUNDARIES, ON SITES LESS THAN 5000m² AND NO CROP PROTECTION STRUCTURES SHALL BE LOCATED WITHIN 3m OF BOUNDARIES.

GENERAL COASTAL ZONE: NO BUILDING WITHIN 10m OF ANY SITE BOUNDARY EXCEPT THAT ON SITES LESS THAN 5000m² THE SETBACK IS 3m FROM ANY BOUNDARY.

REV	DATE	DESCRIPTION
G	22.05.24	CHANGE LOT 3 BOUNDARY - JM/PD
F	8.04.24	SHOW GEN. COASTAL ZONE & AMEND - JM/PD
A	14-09-23	FIRST ISSUE - JM/TM

REF. DATA:

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

CLIENT

MARK ZEILSTRA
290 ORIRA ROAD, UMAWERA,
KOHUKOHU, NORTHLAND

TITLE

STAGE 2
PROPOSED SUBDIVISION OF SECTION 71 & PT SECTION 11 BLK VII MANGAMUKA SD

DATE	MAY 2024	SCALE	1:3000 @A3	
NO.	S17765	SHEET	4/4	Rev. G

Date Plotted: 22/05/2024 File Path: P:\17000 - 17999\17765 - Mark Zeilstra\Drawings\Scheme Plan\S17765 - M Zeilstra - Rev G.dwg

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

APPENDIX 3

SUBDIVISION SUITABILITY REPORT

SUBDIVISION SUITABILITY REPORT

290 Orira Road

Umawera

(Part Section S13 Block VII Mangamuka SD and
Part Section 11 Block VII Mangamuka SD)

RS Eng Ltd • 2 Seaview Road, Whangarei 0110 • **09 438 3273** • **office@RSEng.co.nz**
Consulting Engineers

SUBDIVISION SUITABILITY REPORT

290 Orira Road

Umawera

(Part Section S13 Block VII Mangamuka SD and Part Section 11 Block VII Mangamuka SD)

Report prepared for: Mark Zeilstra

Report reference: 19167

Date: 09 August 2024

Revision: 1

Document Control

Date	Revision	Description	Prepared by:	Reviewed by:	Authorised by:
09/08/2024	1	Resource Consent Issue	C Hay	D Platt	M Jacobson

Contents

Appendices

File: 19167
09 August 2024
Revision: 1

SUBDIVISION SUITABILITY REPORT

290 Orira Road, Umawera

(Part Section S13 Block VII Mangamuka SD and Part Section 11 Block VII Mangamuka SD)

1.0 Introduction

RS Eng Ltd (RS Eng) has been engaged by Mark Zeilstra to investigate the suitability of his properties for residential subdivision. The purpose of this report is to review the identified building areas, assess natural hazards, geotechnical aspects, and on-site wastewater and stormwater disposal.

The client proposes to develop eight new lots. RS Eng however are only assessing proposed Lots 1, 3, 5, and 6. The remaining lots (2 and 4) hold the existing dwellings and buildings, and (7 and 8) are to be used for agriculture. The proposed scheme plan, prepared by Reyburn and Bryant is enclosed in Appendix A.

2.0 Site Description

The properties are located on the northeastern side of Orira Road, approximately 2.9km from its intersection with Te Tio Road. The proposed lots are gently to steeply sloping with gently sloping topography available for the identified building areas. Ground coverage at the identified building areas is currently pasture.

Figure 1: Aerial view of properties (*Source: QGIS, LINZ Boundaries, and Northland 0.4m Imagery*).

3.0 Desk Study

3.1 Referenced/Reviewed Documents

The following documents have been referenced in this report:

- GNS – Geology Of The Kaitaia Area – Isaac – 1996.

3.2 Site Geology

The GNS 1:250,000 scale New Zealand Geology Web Map indicates that the property is located within an area that is underlain by Mangakahia Complex and Karioitahi Group, which have been described as follows: *"Fissile, dark grey to white-weathering siliceous mudstone, blue-grey calcareous mudstone, and minor micritic limestone and chert"* and *"Unconsolidated to poorly consolidated sand, peat, mud and shell deposits (estuarine, lacustrine, swamp, alluvial and colluvial)."*

The investigations have confirmed the Mangakahia Complex at the identified building areas at Lots 1, 3, and 6. Investigations at the identified building area of Lot 5 encountered inferred Pleistocene Alluvium deposits overlying mudstone of the Mangakahia Complex at depth.

3.3 Aerial Photography

RS Eng has undertaken a review of historical aerial photography, specifically images from 1968 and Google Earth imagery. See Figure 2 below of the 1968 image. Several notable features were observed, listed below.

- Signs of relic slope instability are evident over the steep hummocky slopes of Lots 1, 3, and 6 as indicated in red on Figure 2.
- Soil creep is evident over the moderate and steep slopes on the lots.
- A farm race and track has been formed over parts of Lot 3 and Lot 6 which is currently used to gain access to the paddocks which comprise of the identified building areas.
- The existing dwellings and farm buildings are observed in the 1968 images as indicated in blue below.

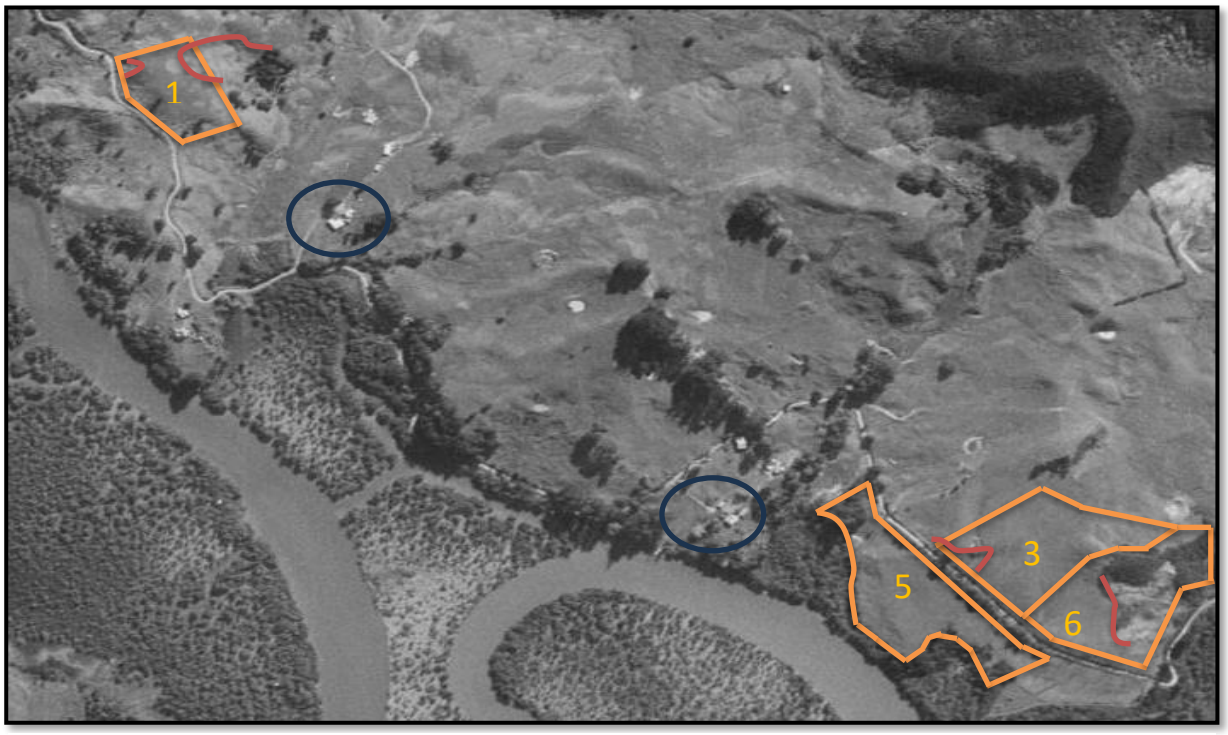


Figure 2: 1968 Aerial Image (Source: www.retrolens.nz).

4.0 Field Investigation

A Technician and Graduate Engineer from this office visited the property on 26 June 2024 to undertake a walkover inspection and nine hand augers. The walkover inspection did not observe any signs of concern at the building site in relation to the proposal.

The hand augers were dug to a maximum depth of 5.0m below ground level (BGL). Shear Vane readings were taken at regular intervals throughout the hand augers. Soil and rock descriptions are in general accordance with the New Zealand Geotechnical Society guideline.

Six Cone Penetration Tests (CPTs) were completed by Geo Data Solutions on 11 July 2024. The CPTs extended to a maximum depth of 14.65m below ground level (BGL).

5.0 Subsoil Conditions

Interpretation of subsurface conditions is based on the investigations shown on the drawings in Appendix B. The conditions are summarised below specific to the identified building areas on the proposed lots.

- Topsoil was encountered across the identified building areas to an approximate depth of 0.25m BGL.
- A variable thickness of hard cemented silt to a maximum depth of 0.8m BGL was encountered across the identified building areas at Lot 3, 5, and 6.
- The identified building areas at lots 1, 3, and 6 generally consisted of a shallow depth of residual soils consisting of stiff to very stiff clayey silts, clayey sandy silts to depths up to approximately 1.3m BGL.
- Extremely weak interbedded completely weathered mudstone and sandstone was encountered across the identified building area at Lot 1 consisting of very stiff clayey silts, silt with some clay, and sandy silt was encountered to depths of 1.4m and 2.3m BGL.
- Extremely weak completely weathered mudstone was encountered across the identified building areas at Lot 3 and 6 consisting of stiff to very stiff silts and clayey silts to a tested depth in the hand augers of 4.0m BGL.
- Pleistocene Alluvium was encountered across the building area of Lot 5, consisting of stiff to very stiff clayey silts and silty clays with some carbonaceous organics to depths of 6.5-8m BGL overlying mudstone, inferred from the CPTs.
- Groundwater was encountered during the investigations at the identified building areas on lots 3, 5, and 6 at varying depths from 0.8m to 3.5m BGL.

6.0 Geotechnical Assessment

6.1 Slope Stability

Proposed Lot 5 is situated on a terrace, adjacent to and falling down to the Orira River. The identified building area is underlain by inferred alluvium and the Mangakahia Complex at depth. Ground slopes at the identified building area on Lot 5 are generally gently to moderately sloping in the order of 5-13°, well set back from slopes considered steep to the west and south.

Mudstone typically stands at low slope angles indicative of the gentler slopes at the identified building areas. The steeper slopes on the lots is representative of more dominant landform likely underlain by more competent and stronger sandstone and or calcareous / siliceous mudstone.

The identified building areas over proposed Lots 1, 3, and 6 are situated over generally gently sloping topography of the Mangakahia Complex with areas of moderate and steep slopes across the proposed lots. The Mangakahia Complex comprises of allochthonous mudstone and sandstone. The identified building areas over Lot 3 is suitably setback from steep slopes, however the identified building area over Lot 1 is located near to steep slopes displaying signs of slope instability, and the identified building area over Lot 6 is located adjacent to steep slopes with signs of soil creep and slope instability.

Given the gently sloping topography at the identified building areas, observations of our investigation, specifically the lack of existing or active slope instability, RS Eng consider the risk of slope instability to be low provided the recommendations within this report and the following lot specific stability recommendations are adhered to.

6.1.1 Lot 6

The identified building area at Lot 6 is located on gently sloping topography, however is adjacent to steep to very steep slopes to the west which exhibit signs of soil creep and potential relic slope instability. The slope height adjacent to the identified building area is in the order of 8-10m, typically sloping at 30°. The slope may potentially be subject to further erosion, soil creep, and regression, therefore RS Eng recommends a minimum 20m building setback be adopted from the crest of the steep western slope to future buildings.

6.1.2 Lot 1

The gentle to steep slope to the east of the identified building area on Lot 1 displays hummocky and non-uniform characteristics, indicating relic slope instability has occurred. Slopes to the west of the identified building area become steep to very steep, with areas displaying signs of shallow slope instability, creep, and erosion. Future buildings at the identified building area shall be protected with soldier pile walls along both eastern and western sides of the future building. The soldier piles walls shall account for a minimum retained depth of 1.5m, however, shall be subject to specific assessment and design at the building consent stage.

6.2 Settlement

At Lot 3, 5 and 6, the investigations observed 5m-6m of potentially compressible clays. The clays are assessed as moderately over consolidated.

For NZS3604 type single-storey light weight construction with average long-term loads limited to 20kPa for buildings and fills, RS Eng assess differential settlements are unlikely to exceed the New Zealand Building Code limits of 1V:240H.

6.3 Liquefaction

Sand, sandy gravels and sandy silts are potentially at risk of liquefaction induced by earthquake ground shaking. Soils potentially prone to liquefaction are generally classified by a normalised soil behaviours index (Ic) less than 2.6, assessed using the CPT. The soils encountered on Lot 5 are potentially susceptible to liquefaction.

Future dwellings are Importance Level 2 structures, as per AS1170. The following values of peak ground acceleration and magnitude are based on MBIE Geotechnical Engineering Module 1, November 2021.

In accordance with MBIE Geotechnical Engineering Module 3, using the software package, CLiq V.3 analysis was undertaken to assess the potential of earthquake induced liquefaction settlement using Boulanger and Idriss (2014). The results of the analysis are presented in Table 1 below.

Table 1: Liquefaction Analysis/Results

Seismic Event	PGA	M_w	Liquefaction Potential (LPI)	Liquefaction Severity (LSN)	Free Field Settlement
ULS	0.19g	6.5	<1 Low risk	1-3 Little to no expression	0-1.7cm
SLS	0.03g	5.8	0 Low Risk	0 No expression	<1cm

Liquefaction triggering during a SLS event is unlikely. During a ULS seismic event, limiting the analysis to a depth of 10m, up to 1.7cm of free field settlement has been assessed at the identified building areas. On this basis, the identified building areas over the proposed lots can be categorised as akin to TC1 as per the Canterbury Residential Guidance.

6.4 Expansive Soils

The clayey soils encountered on-site are likely to be subject to volumetric change with seasonal changes in moisture content (wet winters / dry summers); this is known as expansive or reactive soils. Apart from seasonal changes in moisture content other factors that can influence soil moisture content at the include:

- Influence of garden watering and site drainage.
- The presence of large trees close to buildings. Large trees can cause variation in the soil moisture content for a distance of up to 1.5 times their mature height.
- Initial soil moisture conditions during construction, especially during summer and more so during a drought. Building platforms that have dried out after initial excavation should be thoroughly wet prior to any floor slabs being poured.
- Plumbing leaks.

Based on the characteristics of the subsoils encountered during our investigations, RS Eng Ltd considers the soils as being Class H1 (highly expansive) as per AS2870.

7.0 Flood Hazard

The Northland Regional Council have designated small areas within the boundaries of proposed Lot 5 and 6 as being flood susceptible. The mapped flood susceptible areas are constrained to the low-lying areas around the Orira River, of which the southern and western boundaries of Lot 5 and 6 border. The identified building areas and effluent disposal fields are clear of the mapped flood hazard, with the identified building areas and effluent disposal fields being elevated a minimum of 8-10m above the mapped flood extents. RS Eng considers the risk of inundation at the identified building areas and investigated effluent disposal fields to be low.

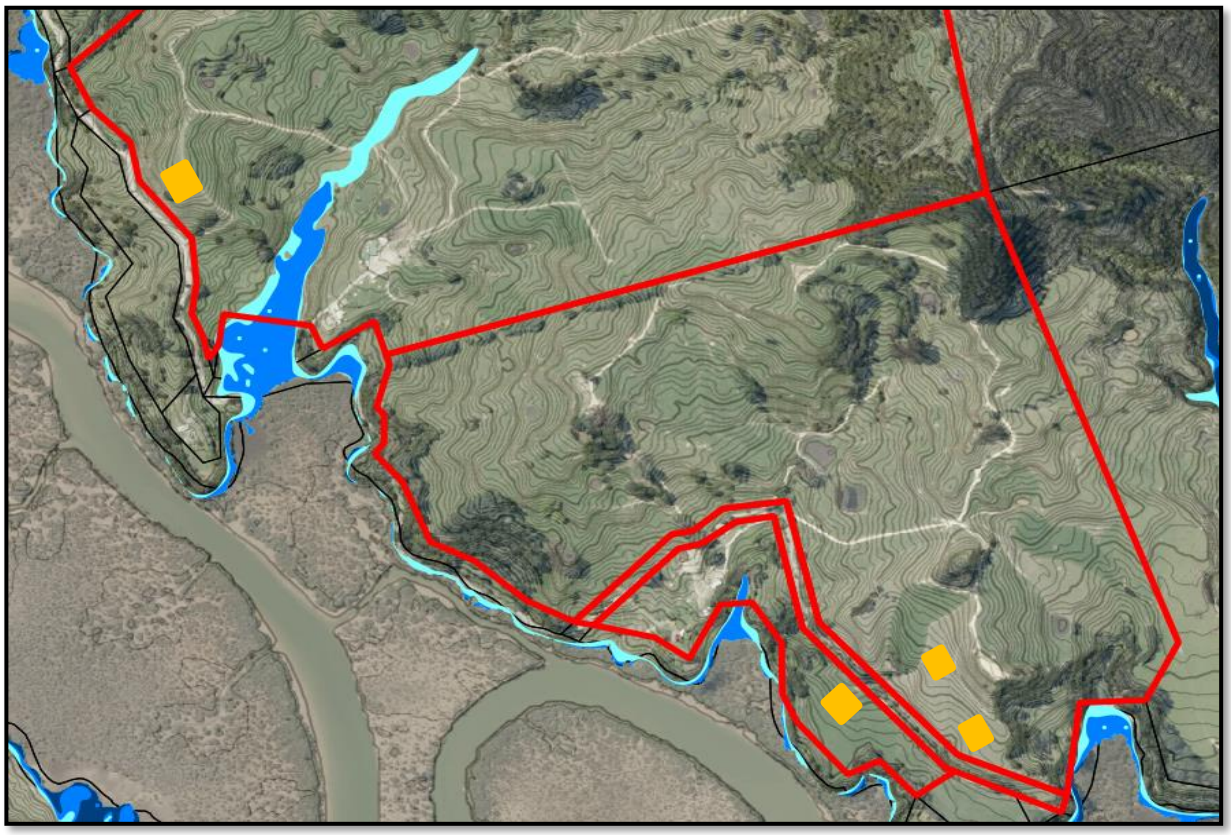


Figure 3: View of flood mapped extents, identified building areas shown in orange
(*Source: NRC GIS Hazard Maps*).

7.1 Overland Flows

Shallow overland flow paths and isolated seepage / saturated areas of ground were observed over Lots 1 and 6 near to the identified building areas. Future buildings should ideally be situated outside of these areas, however if buildings do extend within overland flow paths or the saturated areas, the flow paths shall be re-directed around the building platforms and drainage incorporated to allow for shallow groundwater and saturated soils, subject to specific geotechnical assessment at the building consent stage.

8.0 On-site Wastewater Disposal

To demonstrate the suitability of the proposed lots, a conceptual on-site wastewater disposal design has been prepared for a hypothetical three-bedroom dwelling, for Category 6 soils applying a slope reduction factor of 20%. The design calculations are presented in Table 2 below.

The land available for effluent disposal is typically gently sloped (less than 10°) and linear planar. Subsoil investigations have assessed the soils as being Category 5 and 6 over the proposed lots as per AS/NZS1547. Secondary treated wastewater loading sub-surface pressure compensating drip irrigation lines within a planted and fenced area is suitable.

Due to the allotment sizes and future building proposals which may differ from the investigated building areas and investigated effluent disposal field locations, specific assessment and design shall be undertaken at the building consent stage. It should also be appreciated that alternative methods of effluent disposal may be suitable.

Table 2: Conceptual Wastewater Disposal Design

Number of Bedrooms	3	No.
Number of Persons	5	No.
Flow Allowance	180	L/person/Day
Total Flow	900	L/Day
Irrigation Rate (DIR)	2.0	L/m²/day
Slope Reduction Factor	20	%
Irrigation Area Required	563	m²
Irrigation Line Spacing	1.0	m

Table 3 below demonstrates compliance and minimum required setbacks in accordance with the Northland Regional Council's New Regional Plan.

Table 3: NRC Permitted Discharge Compliance

Feature	Proposed Regional Plan	Available
Identified Stormwater Flow Path	5m	>5m
River, Lake, Pond, Stream, Dam or Wetland	15m	>15m
Existing Water Supply Bore	20m	>20m
Property Boundary	1.5m	>1.5m
Groundwater	0.6m	>0.6m
Reserve area	30%	30%

9.0 Stormwater Assessment

Stormwater attenuation will not be required at subdivision stage. At the Building Consent stage, where impervious surfaces exceed 15% of the lot area, specific design shall be undertaken for future building proposals to achieve stormwater attenuation. It is envisaged where impervious surfaces exceed the permitted activity rule, attenuation can be achieved via tank structures with restricted outlets.

10.0 Engineering Recommendations

10.1 Further Geotechnical Assessment

A site and project specific geotechnical investigation for future buildings should be completed at the building consent stage.

10.2 Site Subsoil Class

In accordance with NZS 1170.5:2004, Section 3.12.3 the site has been assessed for its Site Subsoil Class. Based on the observation listed above RS Eng considers the site soils lie within Site Class C *"Shallow Soil Site."*

10.3 Earthworks

To form access to and create future building platforms, earthworks will be required at the building consent stage. RS Eng makes the following recommendations:

- All cuts and fills shall be subject to specific geotechnical assessment at the building consent stage for site specific proposals, and shall consider the effects of the proposed earthworks on slope stability and settlement.
- No fills shall be undertaken at the identified building area of Lot 1, without specific geotechnical assessment.
- Surface water cut-off drains shall be considered upslope of future building platforms, retaining walls, or driveways.
- Cut and fill batters should be sloped at angles less than 1V to 3H, unless suitably retained.
- Site works shall be completed generally in accordance with NZS4431.

10.4 Building Setback

Future buildings on Lot 6 shall be setback a minimum of 20m from the crest of the steep western slopes without any specifically designed soldier piles or similar, subject to specific geotechnical assessment at the building consent stage.

Future buildings on Lot 1 are expected to be protected by a specifically designed soldier pile wall as further outlined in Section 10.5.

10.5 Shallow Foundations

The soils at the identified building areas are not considered 'Good Ground' due to the effects of expansive soils. Standard type NZS3604 and raft foundations are suitable, provided they are specifically designed to account for expansive soils, as per AS2870. RS Eng assesses that an Ultimate Bearing Capacity of 200kPa to 300kPa is available beneath the topsoil at the identified building areas, however shall be confirmed by investigations at the building consent stage.

Foundations on or adjacent to moderate and steep slopes shall also consider the effects of soil creep to a minimum depth of 1.5m below current ground level, generally on or within 5.0m of slopes >14°.

Future buildings on Lot 1 shall be protected by soldier pile walls on both the eastern and western sides of future buildings. The soldier pile walls shall be subject to specific design and assessment at the building consent stage, however a minimum retained depth of 1.5m shall be accounted for.

10.6 Stormwater Disposal

Uncontrolled and concentrated stormwater discharges can result in erosion and slope instability. RS Eng recommends that stormwater is collected where possible and piped to available watercourses or dispersal structures, designed at the building consent stage.

11.0 Conclusions

RS Eng Ltd concludes that the identified building areas are suitable provided the recommendations and limitations stated within this report are adhered to.

RS Eng Ltd also concludes, in terms of Section 106 of the Resource Management Act 1991, and subject to the recommendations of this report that:

a) the land in respect of which a consent is sought, or any structure on the land, is not or is not likely to be subject to material damage by slippage, subsidence or inundation from any source; and:

b) Repealed.

12.0 Limitations

This report has been prepared solely for the benefit of our client. The purpose is to determine the engineering suitability of the proposed subdivision, in relation to the material covered by the report. The reliance by other parties on the information, opinions or recommendations contained therein shall, without our prior review and agreement in writing, do so at their own risk.

Recommendations and opinions in this report are based on data obtained as previously detailed. The nature and continuity of subsoil conditions away from the test locations are inferred and it should be appreciated that actual conditions could vary from those assumed. If during the construction process, conditions are encountered that differ from the inferred conditions on which the report has been based, RS Eng should be contacted immediately.

Construction site safety is the responsibility of the builder/contractor. The recommendations included herein should not be construed as direction of the contractor's methods, construction sequencing or procedures. RS Eng can provide recommendations if specifically engaged to, upon request.

This report does not address matters relating to the National Environmental Standard for Contaminated Sites, and if applicable separate advice should be sought on this matter from a suitably qualified person.

Prepared by:

Codie Hay
Technician

Reviewed by:

David Platt
Team Leader - Geotechnical
NZDE(Civil), MEngNZ

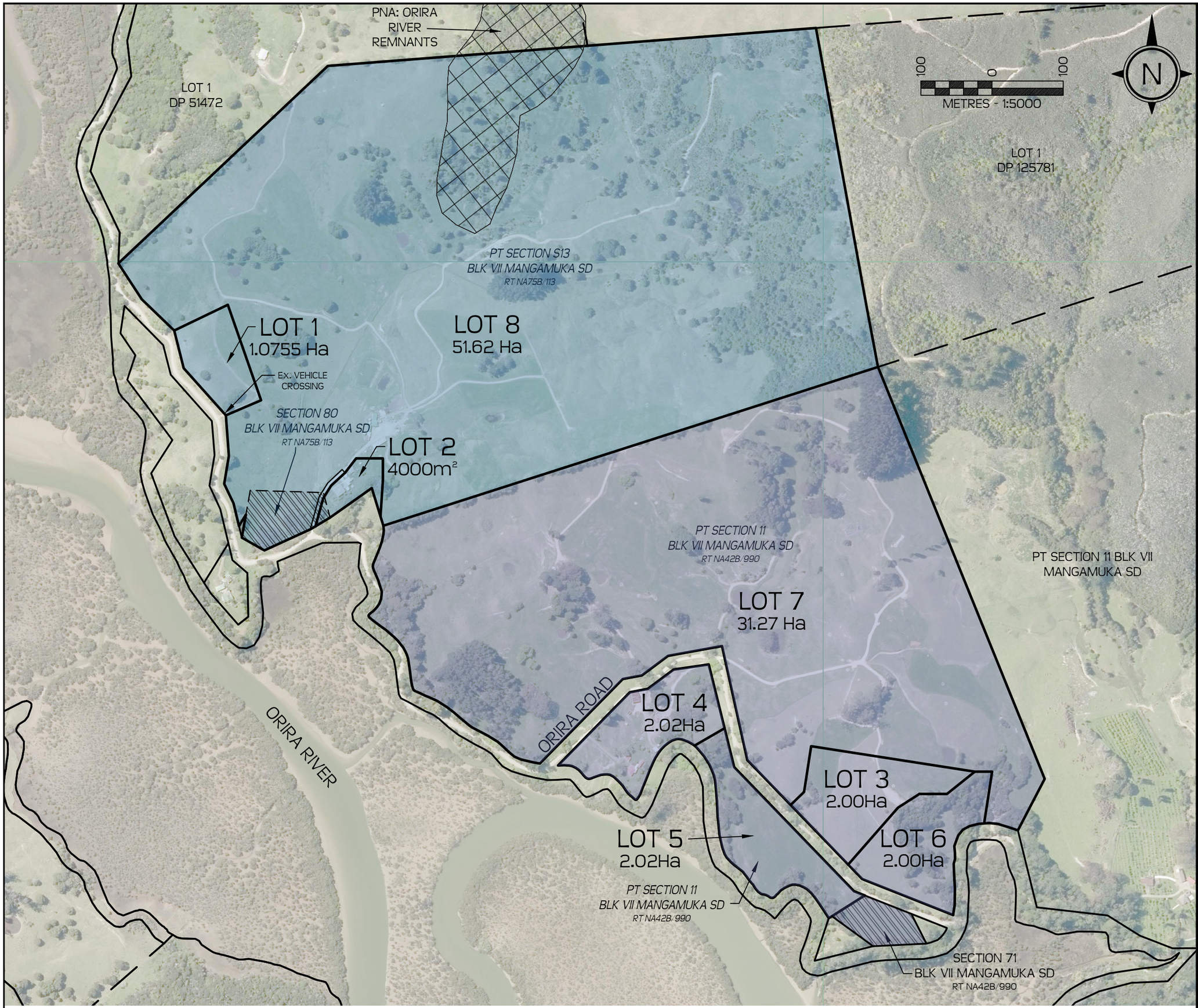
Approved by:

Matthew Jacobson
Director
NZDE(Civil), BE(Hons)(Civil), CPEng, CMEngNZ

RS Eng Ltd

Appendix A

Scheme Plan



CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6. THIS PLAN IS COPYRIGHT TO REYBURN & BRYANT (1999) LIMITED.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 04m 2014-2016 RURAL AERIAL SOURCED FROM AERIAL SURVEYS LTD INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

KEY:

STAGE 1

STAGE 2

GENERAL COASTAL ZONE (REMAINING AREAS ARE RURAL PRODUCTION ZONE)

SEE SHEET 03 OF 04 FOR EASEMENT DETAILS

TITLE AREA: 95.2590 Ha
SUBD'N AREA: 92.4078 Ha
COMPRISED IN: PT RT NA42B/990 & NA75B/113

NOTE: SUBD'N AREA EXCLUDES LOT 1 DP 132729 (INCLUDED IN RT NA75B/113 AREA) & SEC 71 BLK VII MANGAMUKA SD (PT RT NA42B/990)

BUILDING SETBACKS:

RURAL PRODUCTION ZONE: NO BUILDING WITHIN 10m OF ANY BOUNDARY, EXCEPT THAT NO ACCESSORY BUILDINGS SHALL BE ERECTED WITHIN 3m OF BOUNDARIES OTHER THAN ROAD BOUNDARIES, ON SITES LESS THAN 5000m² AND NO CROP PROTECTION STRUCTURES SHALL BE LOCATED WITHIN 3m OF BOUNDARIES.

GENERAL COASTAL ZONE: NO BUILDING WITHIN 10m OF ANY SITE BOUNDARY EXCEPT THAT ON SITES LESS THAN 5000m² THE SETBACK IS 3m FROM ANY BOUNDARY.

REV	DATE	DESCRIPTION
F	8.04.24	SHOW GEN. COASTAL ZONE & AMEND - JM/PD
E	2.04.24	INCREASE LOT 1 SIZE, REMOVE ROW - JM/PD
A	14-09-23	FIRST ISSUE - JM/TM

REF. DATA:

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

CLIENT

MARK ZEILSTRA
290 ORIRA ROAD, UMAWERA,
KOHUKOHU, NORTHLAND

TITLE

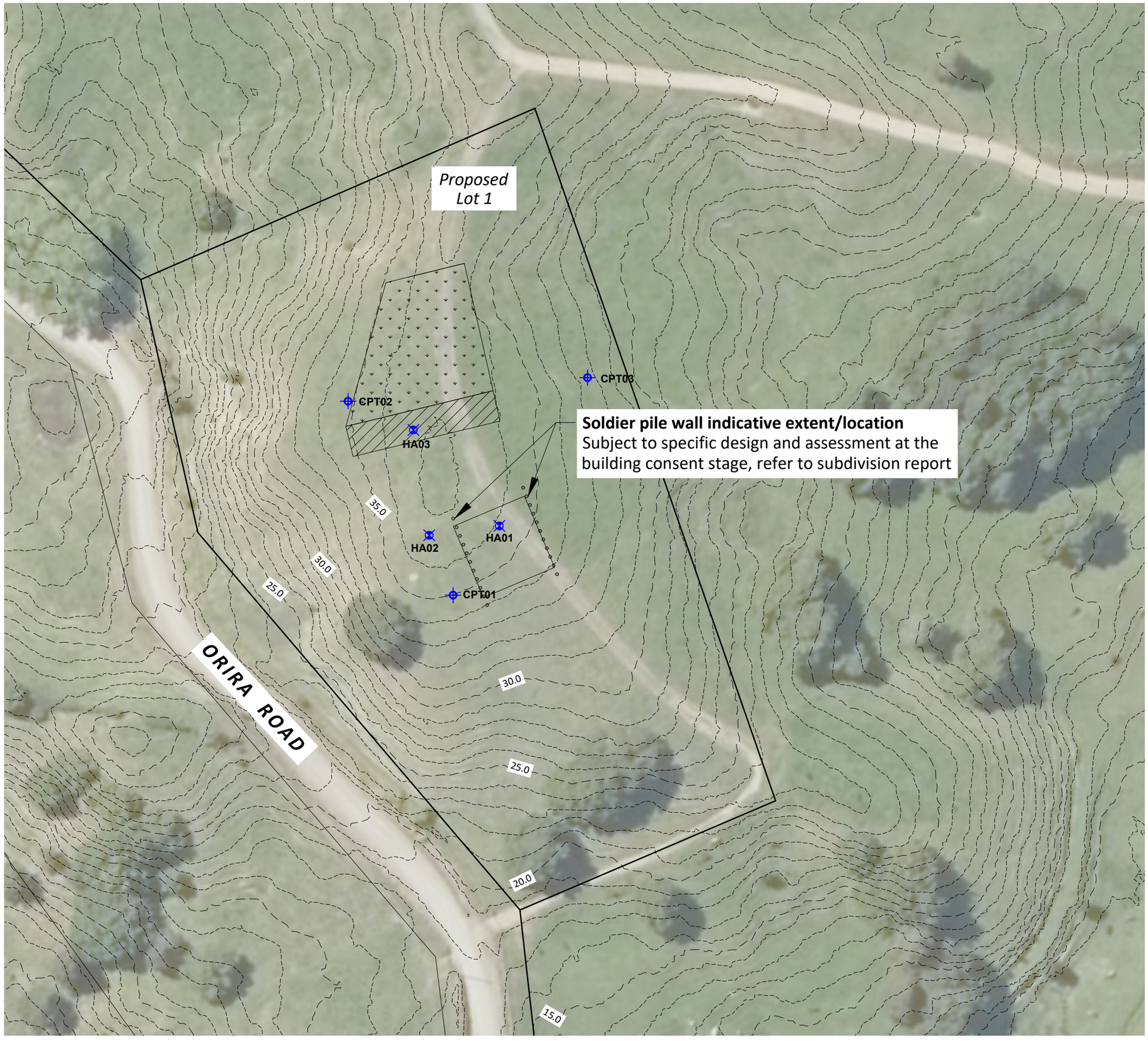
OVERALL PROPOSED SUBDIVISION OF SECTION S13 & PT SECTION 11 BLK VII MANGAMUKA SD

DATE	APRIL 2024	SCALE	1:5000 @A3	
NO.	S17765	SHEET	2/4	Rev. F

LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL

Appendix B

Drawings



NOTES:

- If any part of these documents are unclear, please contact RSEng Ltd.
- This plan is copyright to RSEng Ltd and should not be reproduced without prior permission.

KEY

- Hand Auger Location
- Cone Penetrometer Test Location
- Identified Building Area
- Identified Effluent Disposal Field
- Effluent Reserve Area Available

Contours are shown at 1.0m crs.
Contours are derived from LiDAR (2018) and are shown at NZVD2016 Vertical Datum.

0 5 10 15 20 1:1000
PLAN

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

Title
SUBDIVISION SUITABILITY REPORT
LOT 1
INVESTIGATION PLAN

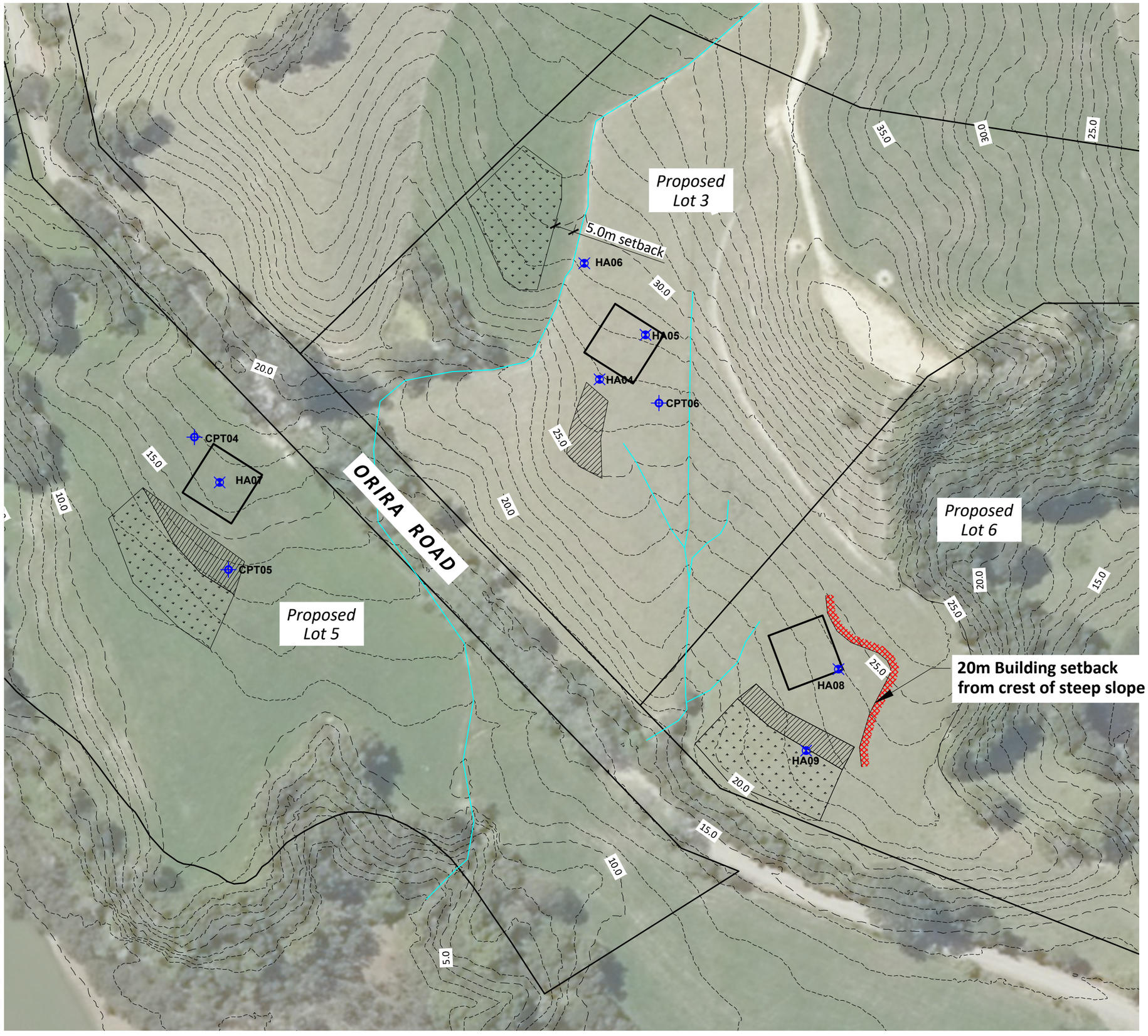
Client
MARK ZEILSTRA

Location
ORIRA ROAD
UMAWERA

Date	Rev	Notes
6/08/2024	A	ORIGINAL ISSUE

Scale	Original	Rev
1:1000	A3	A

Drawn	Approved	File #	Sheet
CH	MJ	19167	1



NOTES:

- If any part of these documents are unclear, please contact RSEng Ltd.
- This plan is copyright to RSEng Ltd and should not be reproduced without prior permission.

KEY

- Hand Auger Location
- Cone Penetrometer Test Location
- Identified Building Area
- Identified Effluent Disposal Field
- Effluent Reserve Area Available
- 20m Building Setback
- Evident Overland Flow Paths

Contours are shown at 1.0m crs.
Contours are derived from LiDAR (2018) and are shown at NZVD2016 Vertical Datum.

0 5 10 15 20
PLAN 1:1000

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

Title
SUBDIVISION SUITABILITY REPORT
LOT 3, 5, & 6
INVESTIGATION PLAN

Client
MARK ZEILSTRA

Location
ORIRA ROAD
UMAWERA

Date	Rev	Notes
6/08/2024	A	ORIGINAL ISSUE

Scale	Original	Rev
1:1000	A3	A

Drawn	Approved	File #	Sheet
CH	MJ	19167	2

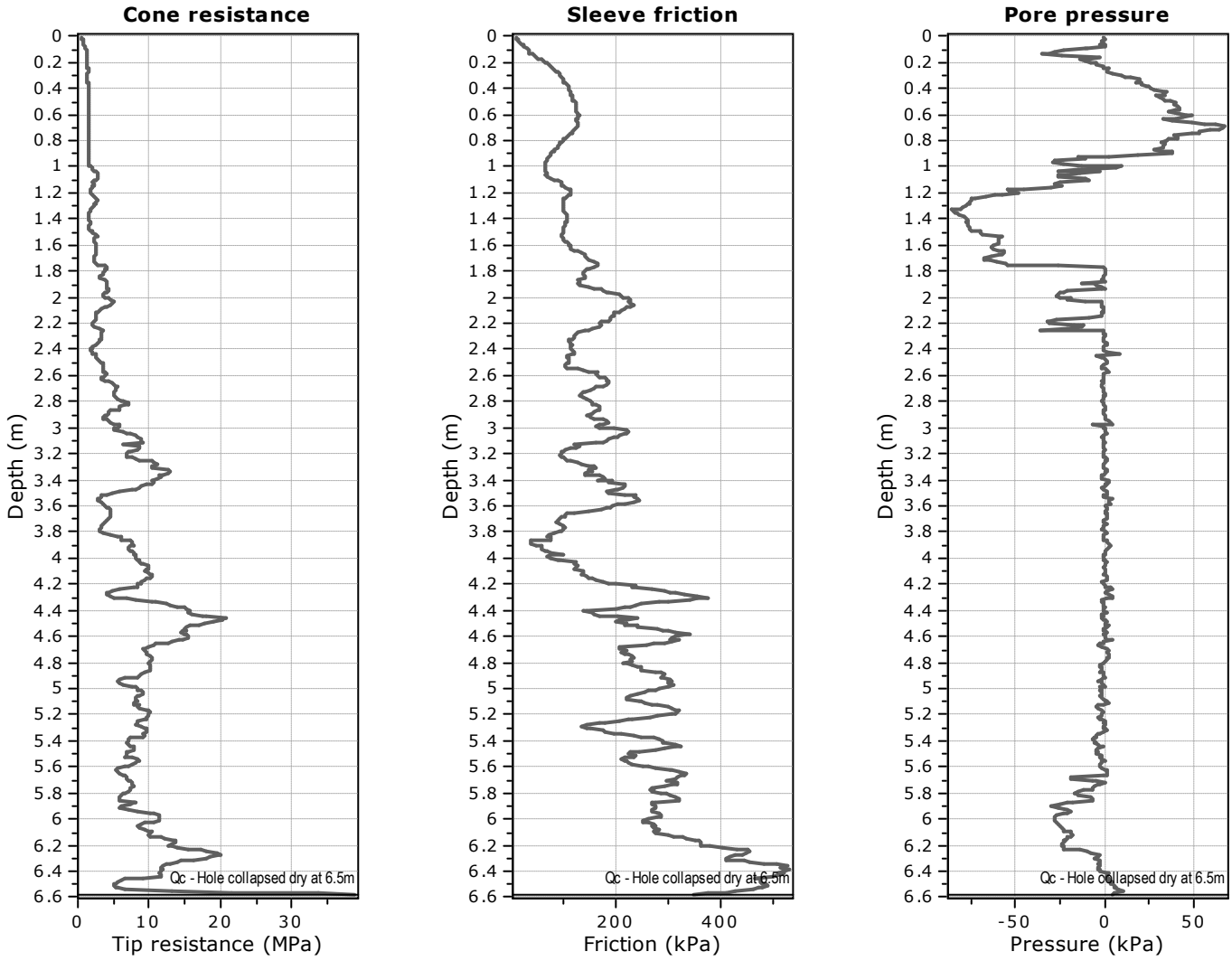
Appendix C

Subsurface Investigations

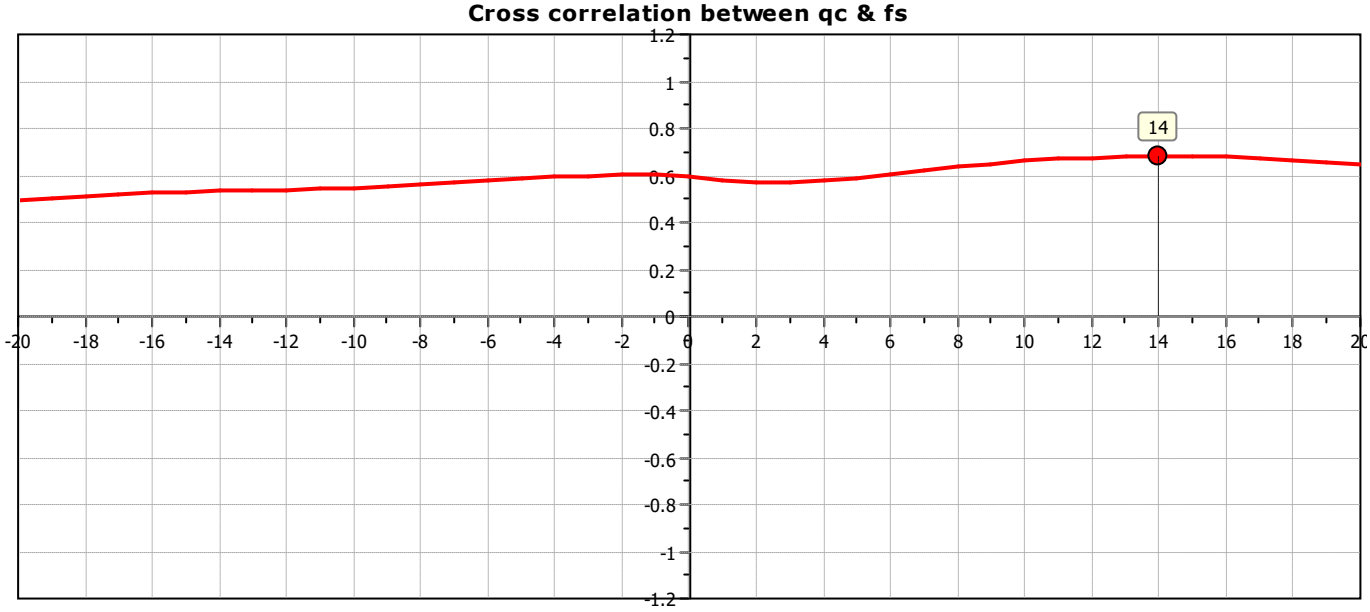
Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 01
Total depth: 6.58 m, Date: 11/07/2024
Coords: lat -35.311959° lon 173.565272°
Cone Type: DC10

Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



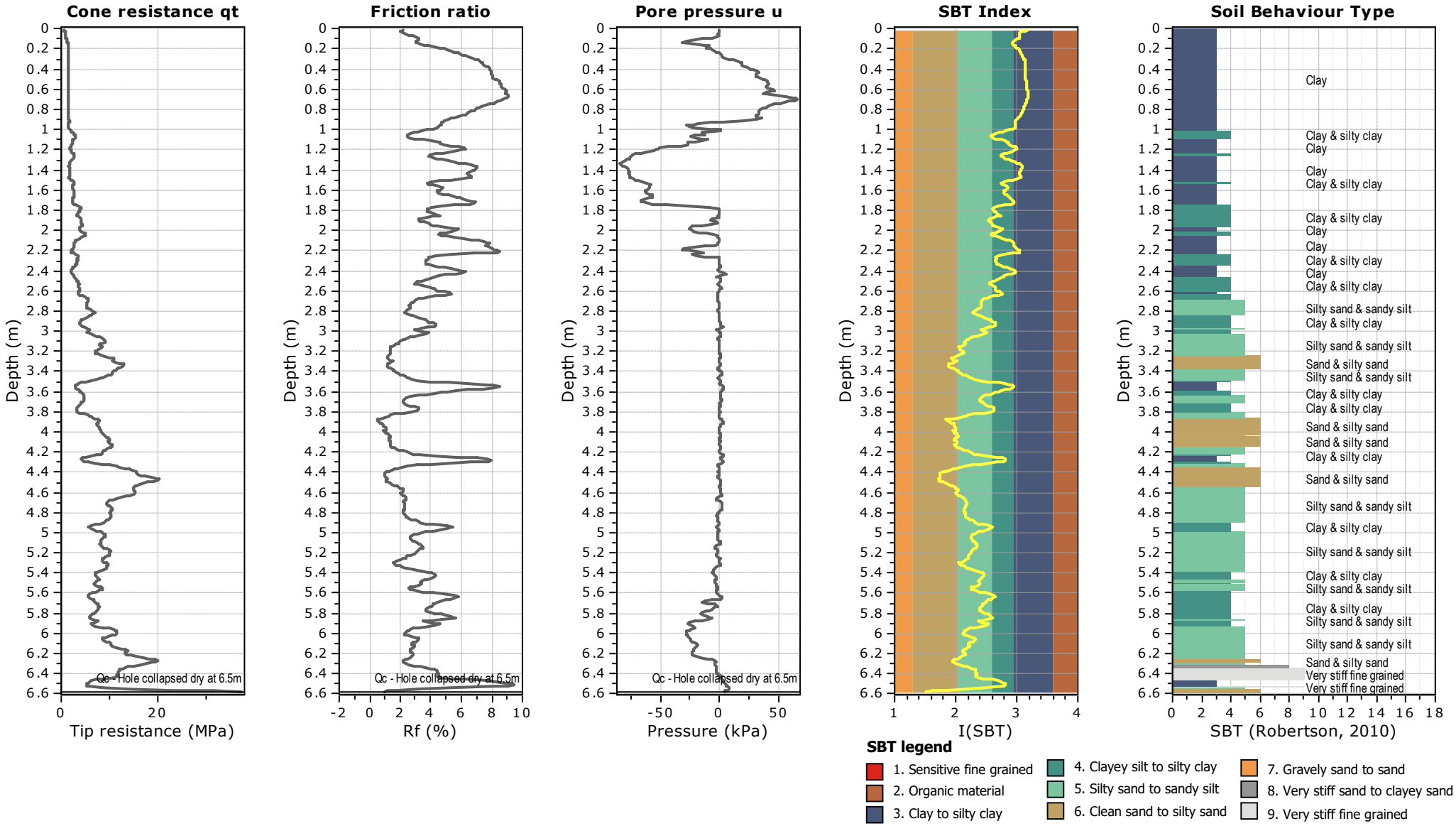
The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).



Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 01
Total depth: 6.58 m, Date: 11/07/2024
Coords: lat -35.311959° lon 173.565272°
Cone Type: DC10

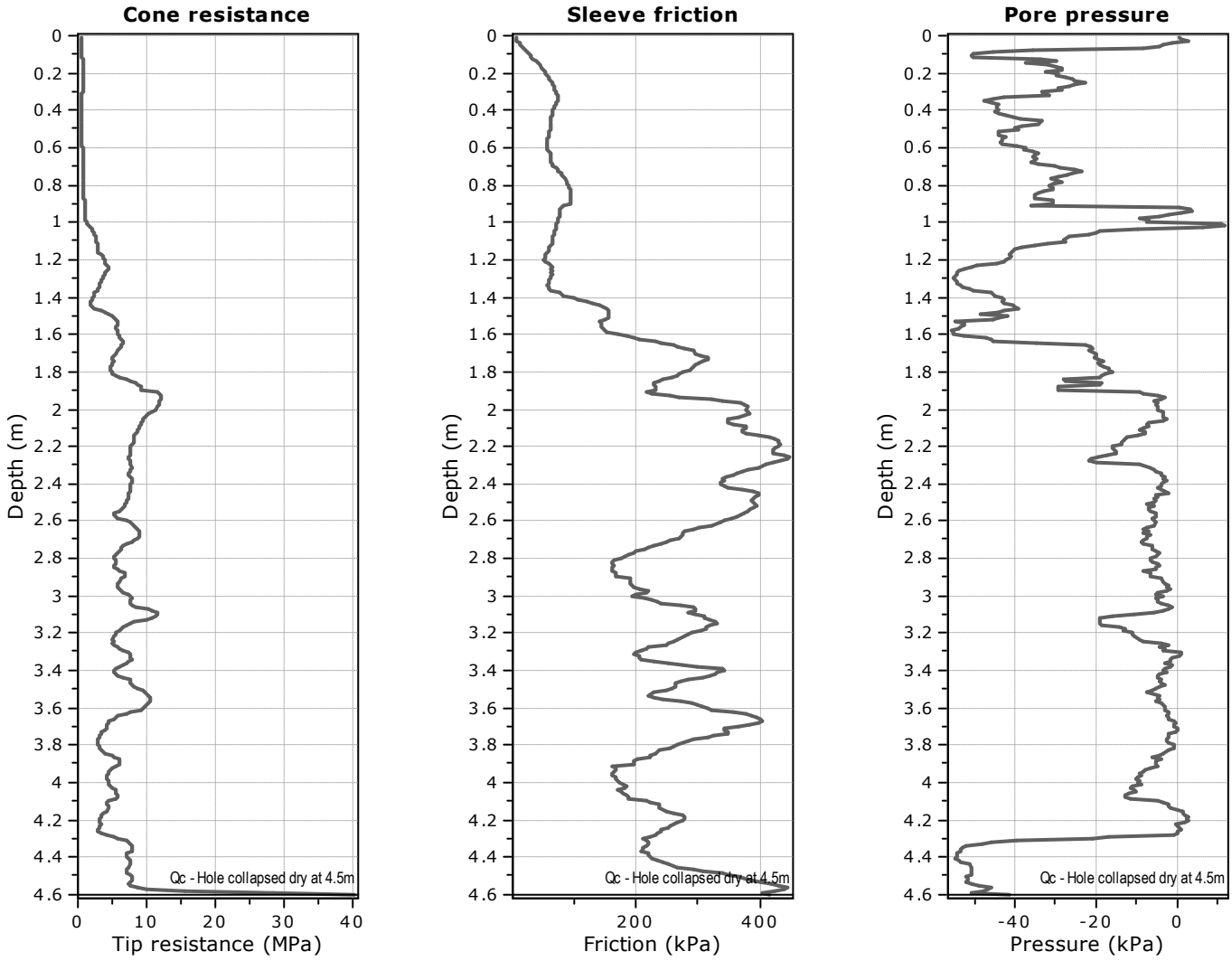
Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



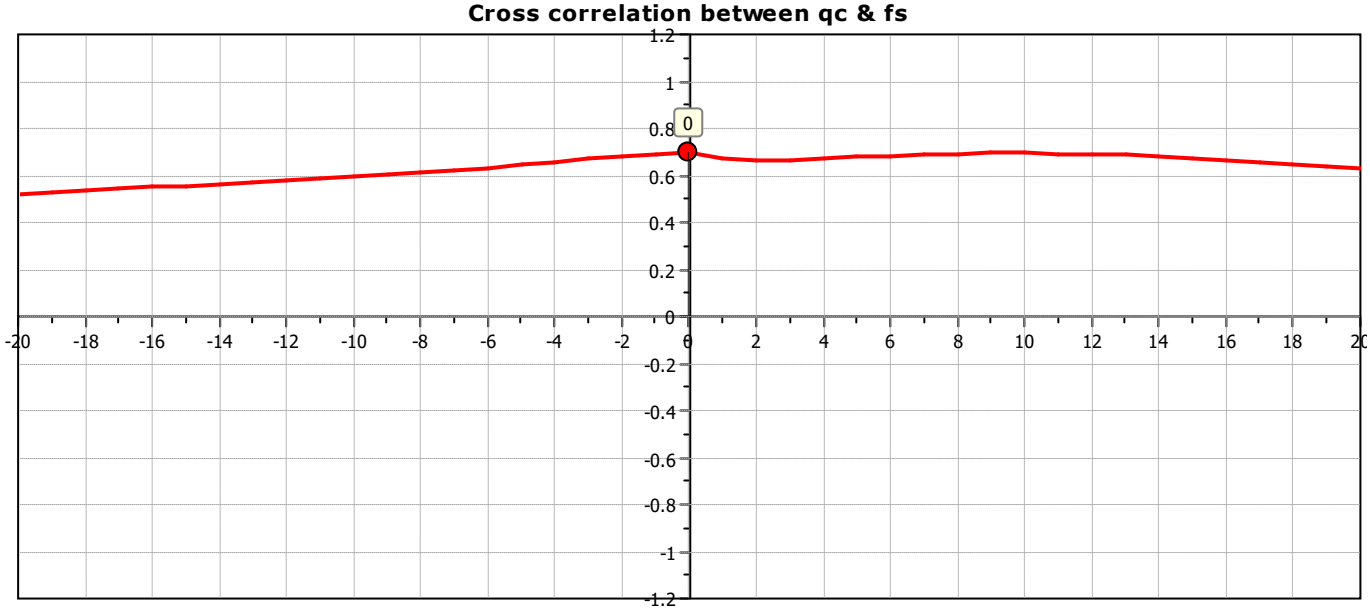
Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 02
Total depth: 4.60 m, Date: 11/07/2024
Coords: lat -35.311533° lon 173.56507°
Cone Type: DC10

Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



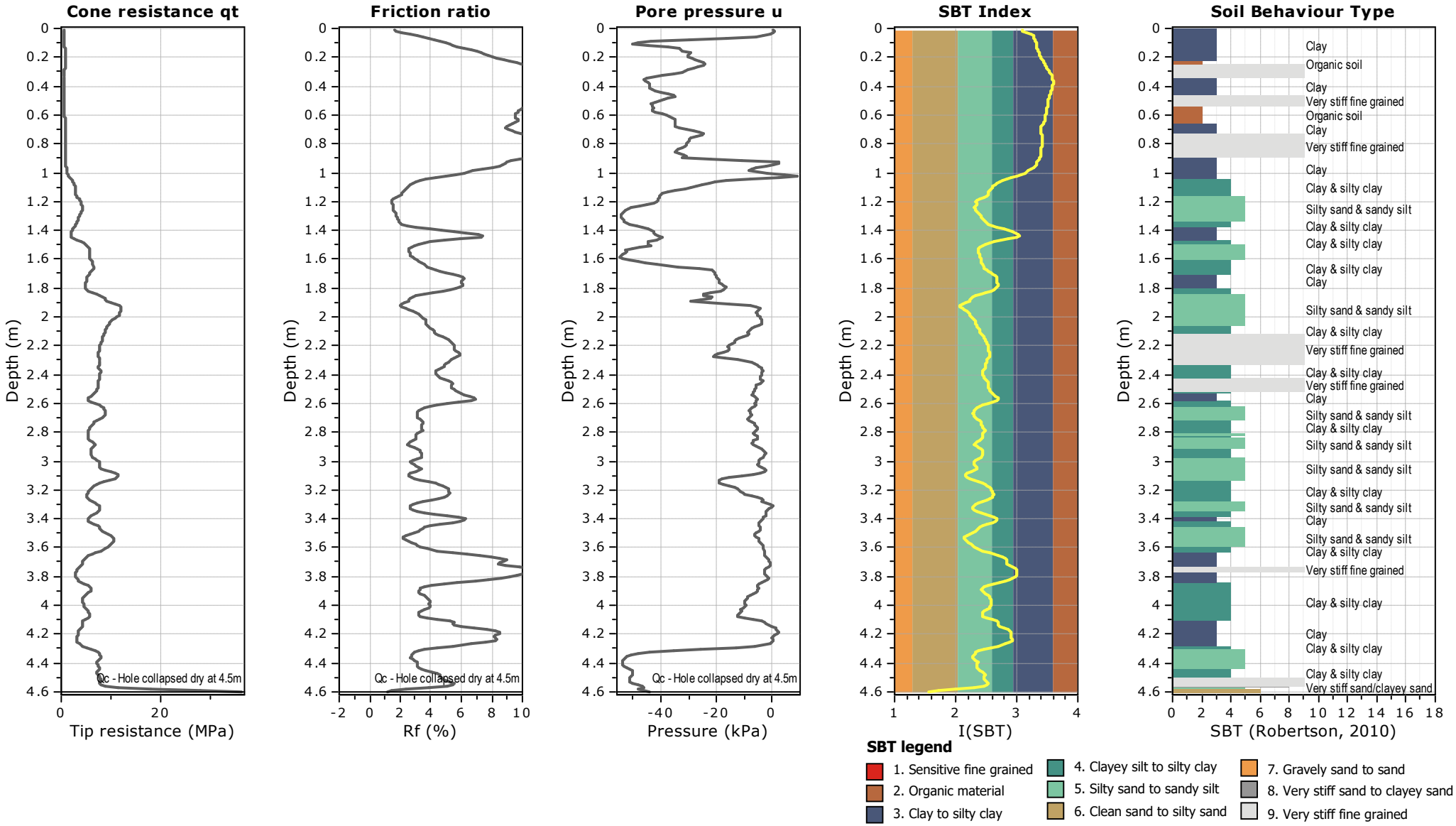
The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).



Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 02
Total depth: 4.60 m, Date: 11/07/2024
Coords: lat -35.311533° lon 173.56507°
Cone Type: DC10

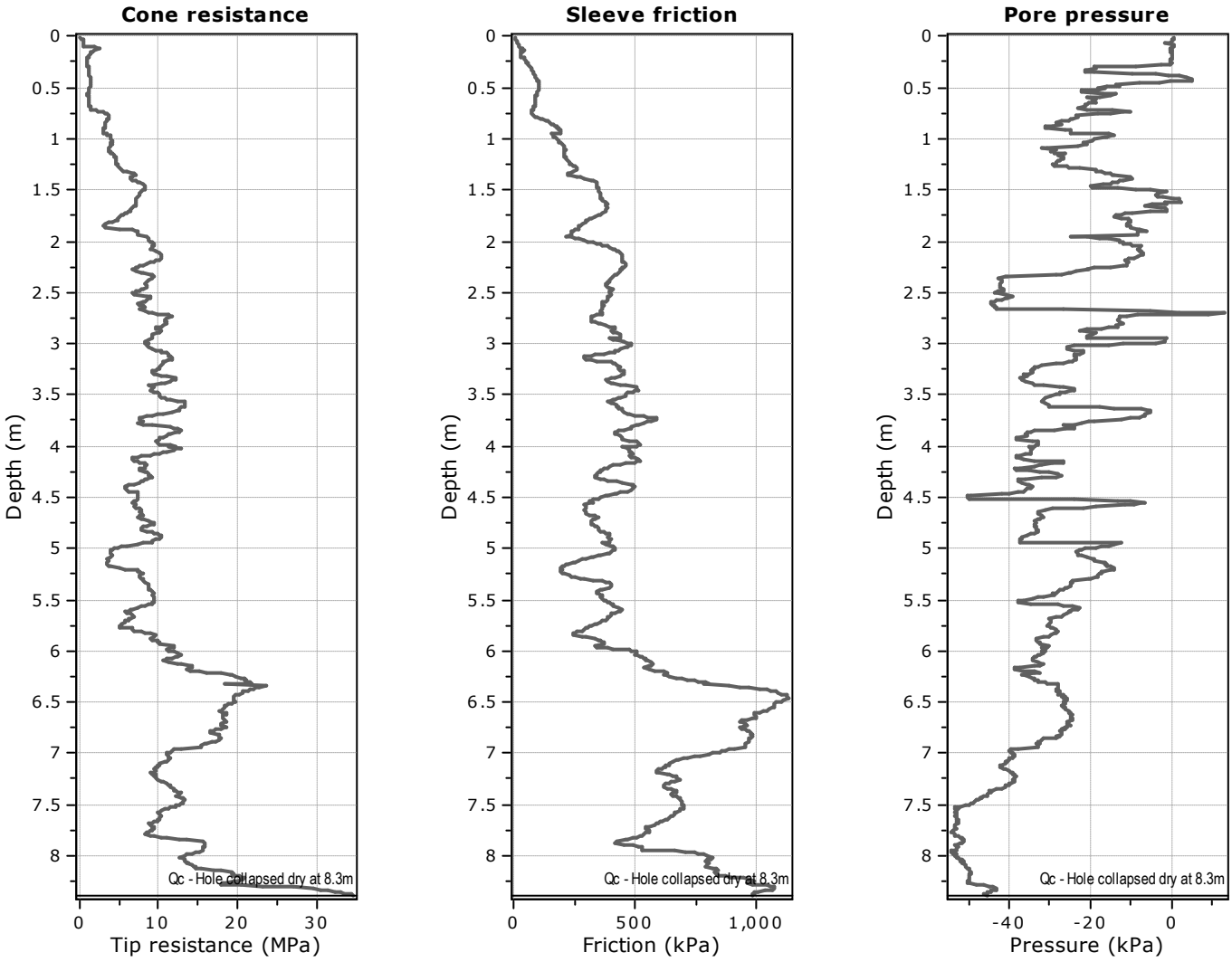
Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



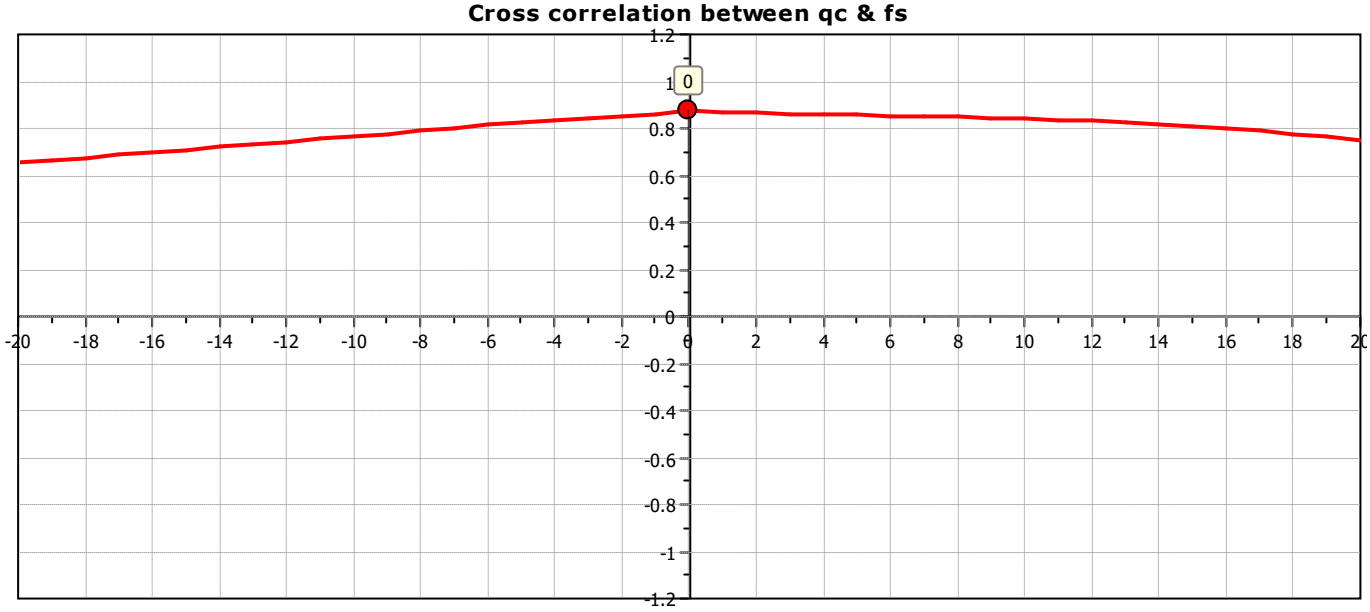
Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 03
Total depth: 8.39 m, Date: 11/07/2024
Coords: lat -35.311582° lon 173.565605°
Cone Type: DC10

Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



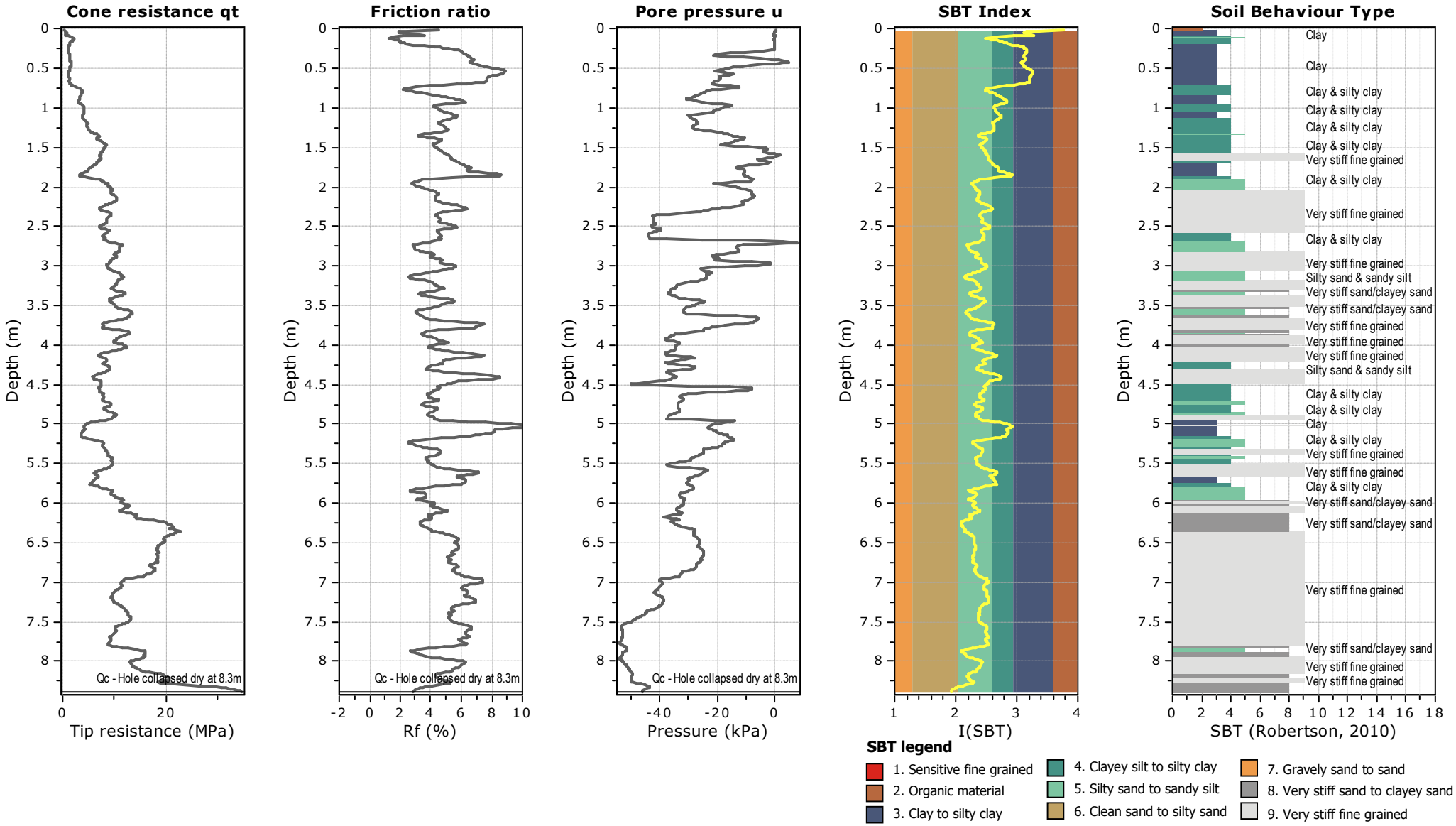
The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).



Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 03
Total depth: 8.39 m, Date: 11/07/2024
Coords: lat -35.311582° lon 173.565605°
Cone Type: DC10

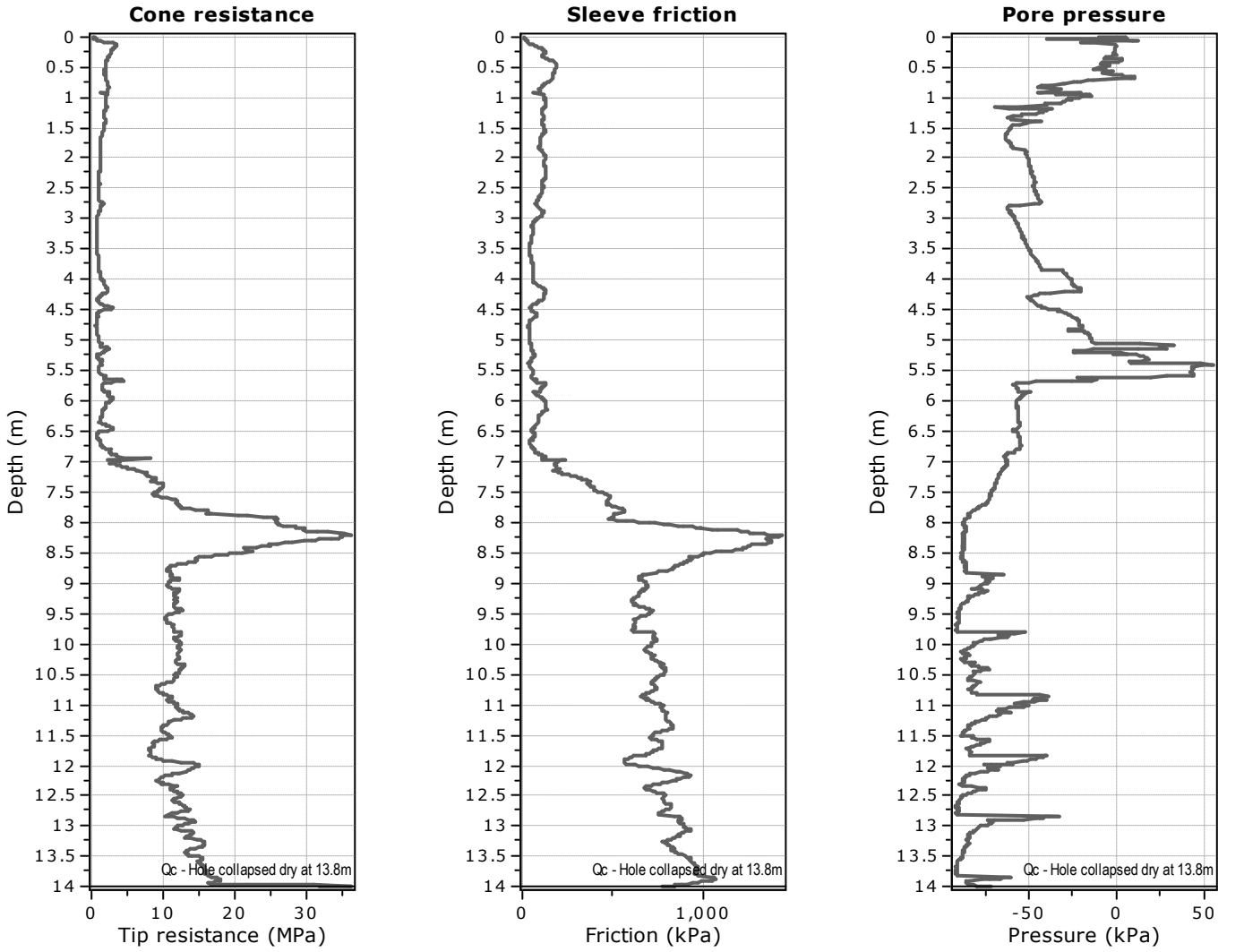
Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



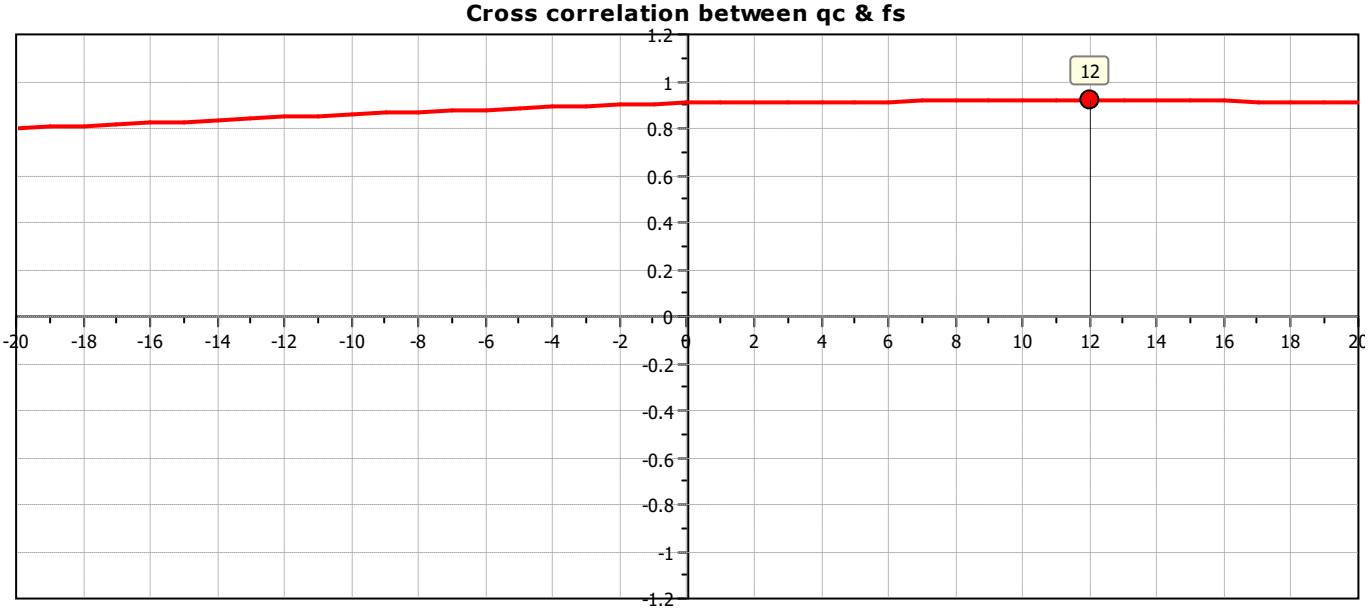
Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 04
Total depth: 13.99 m, Date: 11/07/2024
Coords: lat -35.31764° lon 173.573708°
Cone Type: DC10

Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



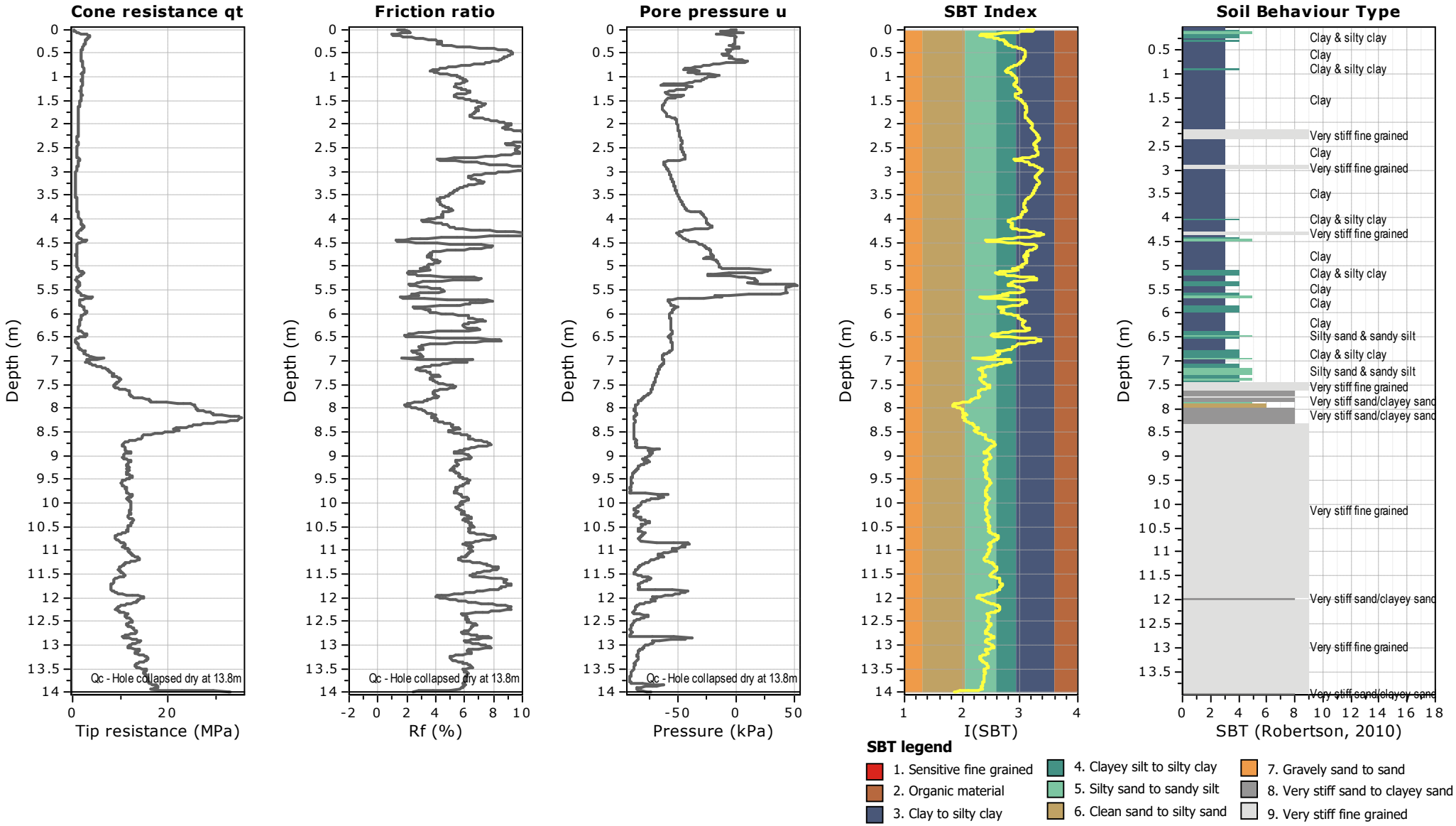
The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).



Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 04
Total depth: 13.99 m, Date: 11/07/2024
Coords: lat -35.31764° lon 173.573708°
Cone Type: DC10

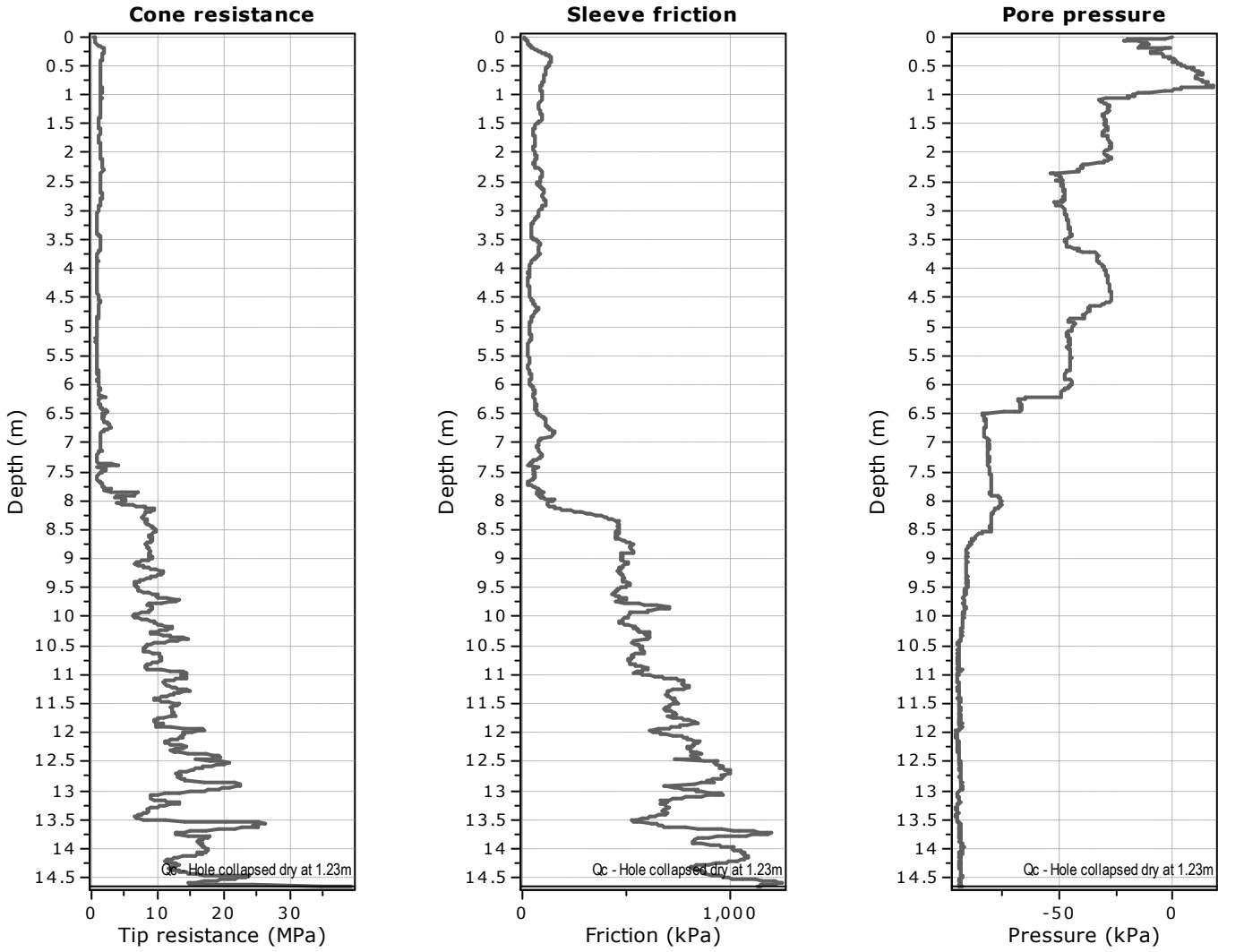
Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



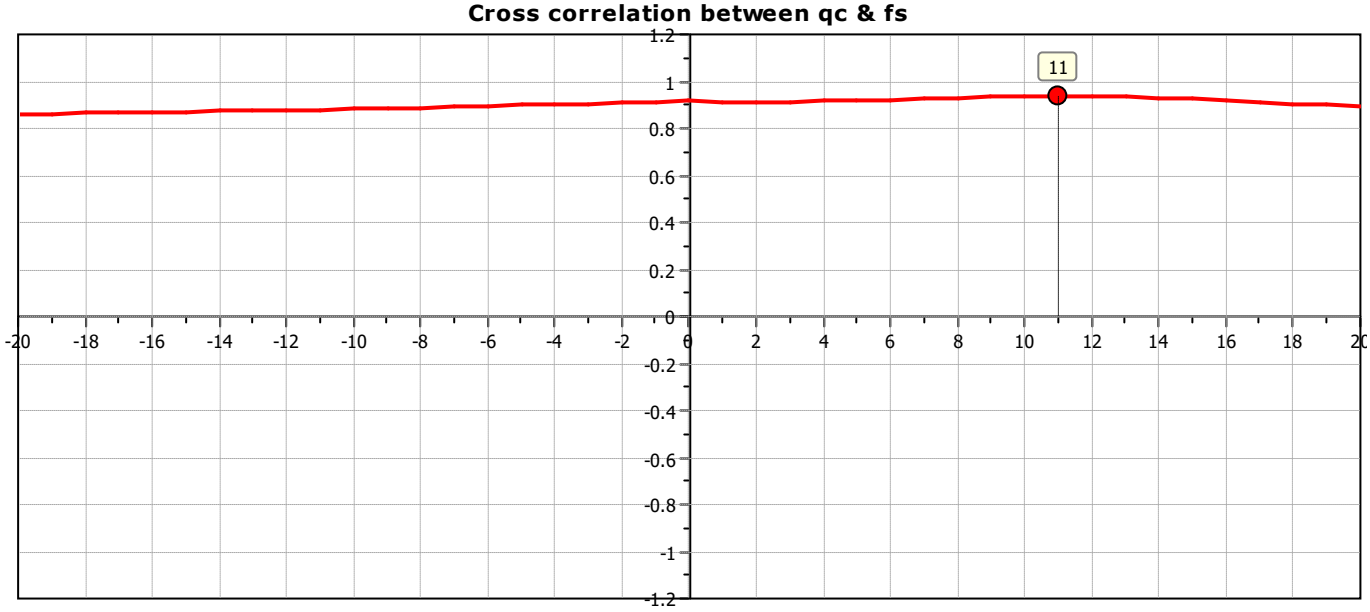
Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 05
Total depth: 14.65 m, Date: 11/07/2024
Coords: lat -35.318009° lon 173.573879°
Cone Type: DC10

Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



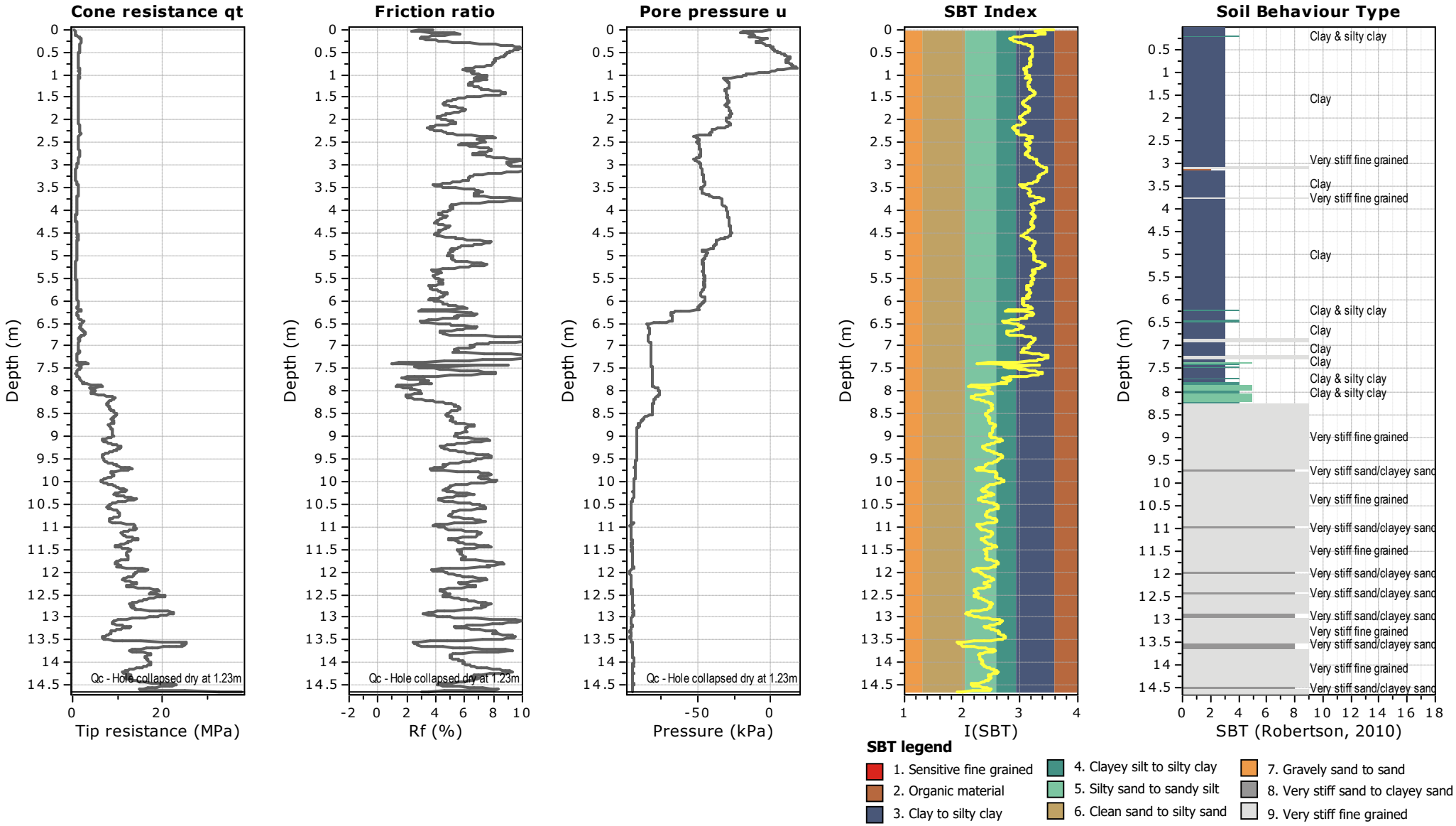
The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).



Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 05
Total depth: 14.65 m, Date: 11/07/2024
Coords: lat -35.318009° lon 173.573879°
Cone Type: DC10

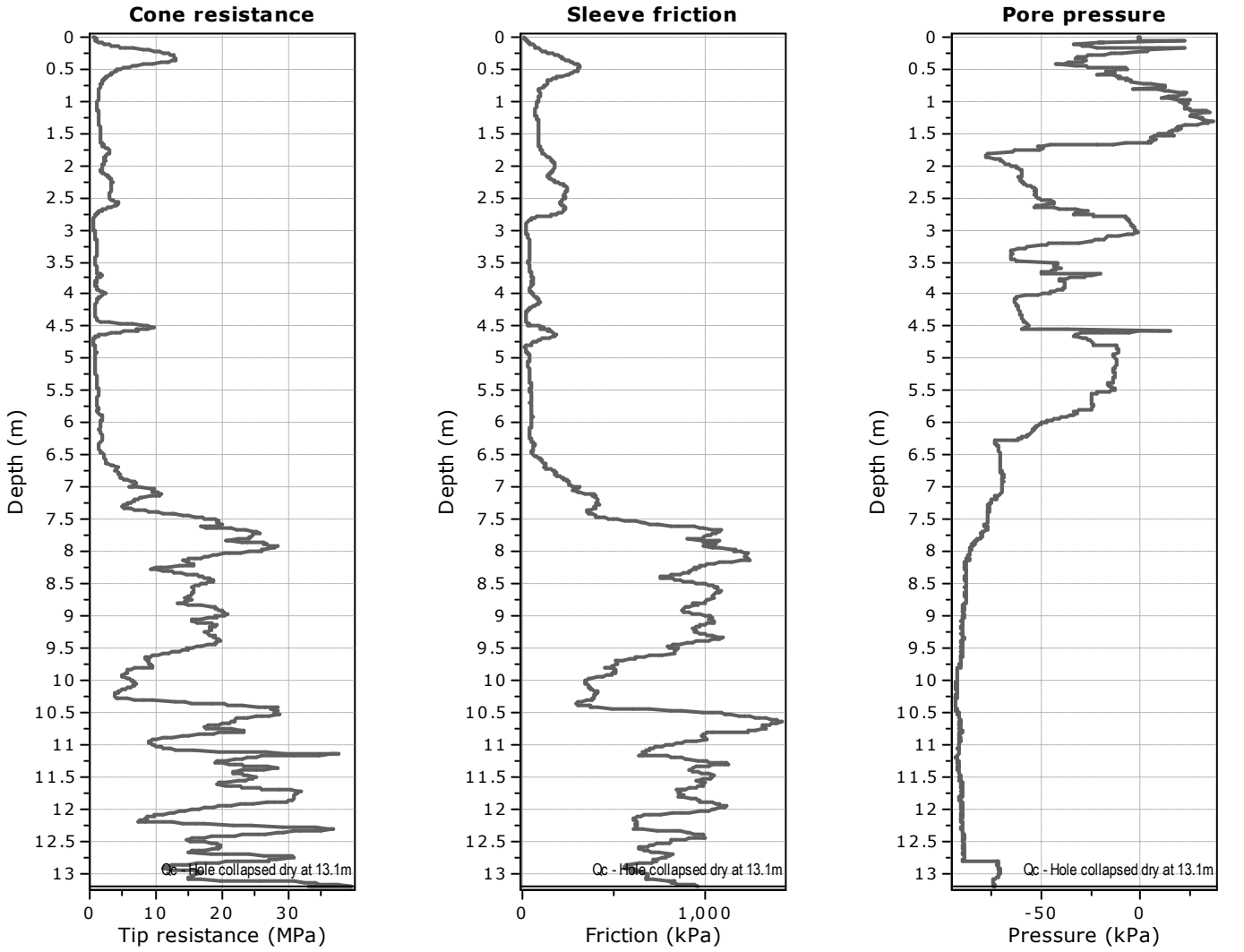
Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



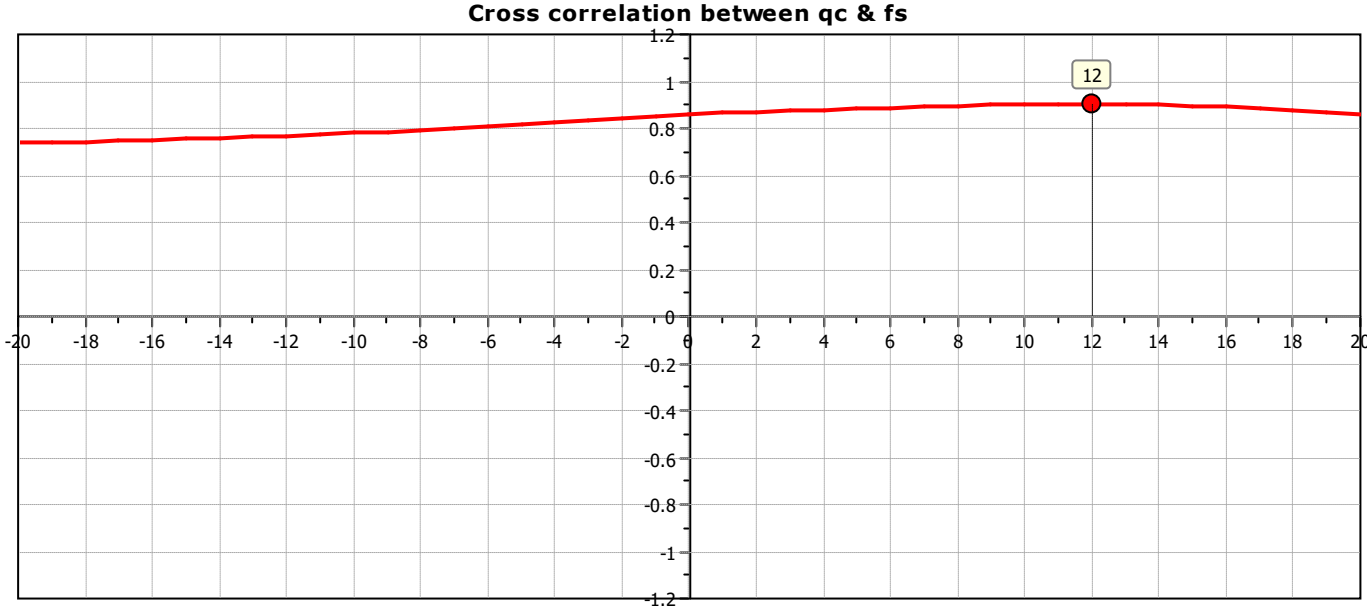
Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 06
Total depth: 13.19 m, Date: 11/07/2024
Coords: lat -35.317594° lon 173.575072°
Cone Type: DC10

Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



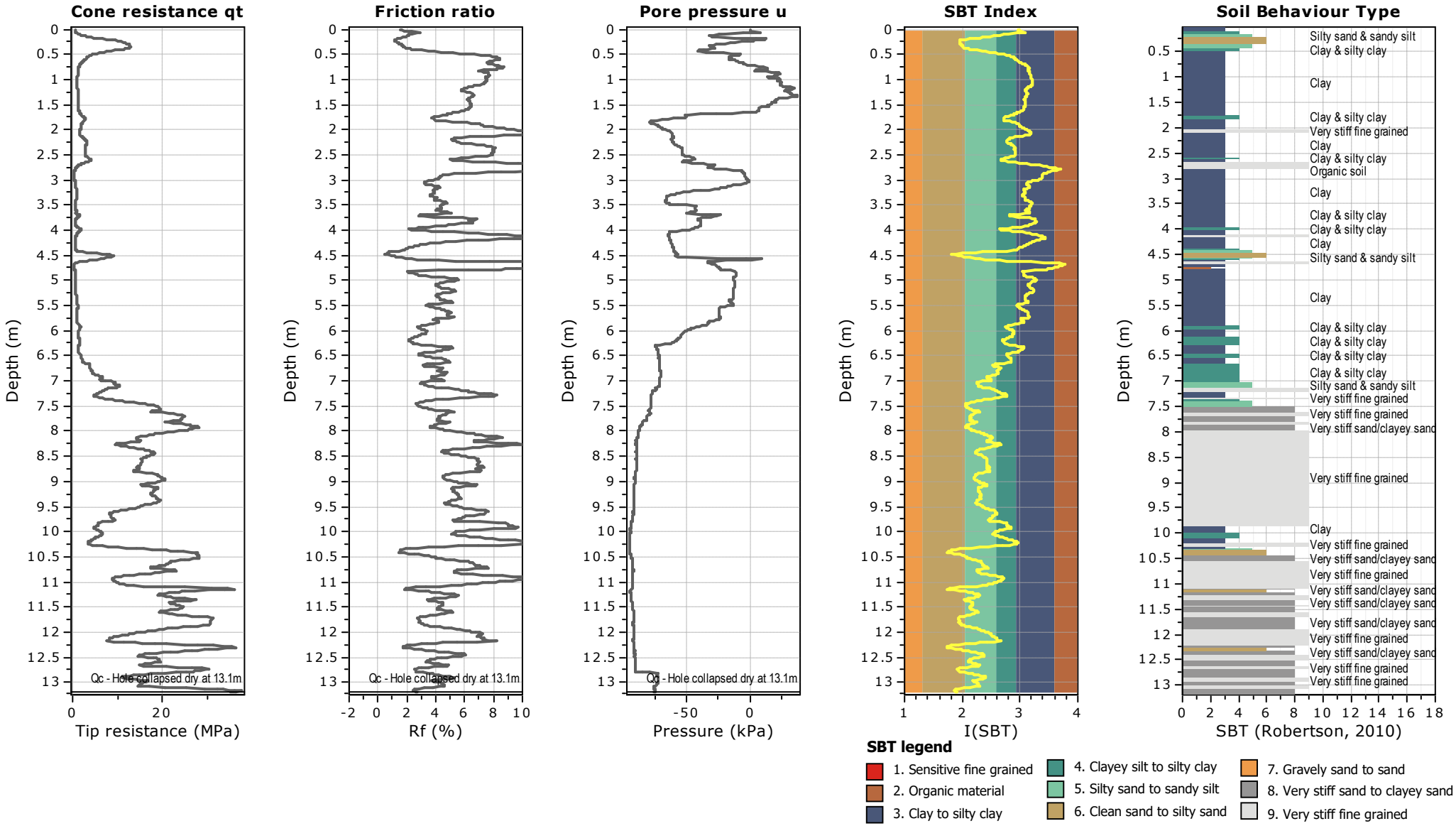
The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).



Geo Data Solutions (GDS) NZ Ltd.
Email: Josh@gdsnz.co. nz
www.gdsnz.co.nz

CPT: 06
Total depth: 13.19 m, Date: 11/07/2024
Coords: lat -35.317594° lon 173.575072°
Cone Type: DC10

Project: **RS Eng Ltd | 19167 | GDS NZ Ltd**
Location: **290 Orira Road, Umawera | Holes dipped onsite using Dipmeter**



RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

HAND AUGER LOG

HOLE NO.: HA01

CLIENT: Mark Zeilstra
PROJECT: Geotechnical Investigations
JOB NO.: 19167

SITE LOCATION: 290 Orira Road Umawera
CO-ORDINATES: 1651404mE, 6092224mN
ELEVATION: 33.9m
START DATE: 26/06/2024
END DATE: 26/06/2024
LOGGED BY: CH

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)	LEGEND	SCALA PENETROMETER (Blows / 0mm)	VANE SHEAR STRENGTH (kPa) Vane: GEO3603 – Values	WATER
TS	TOPSOIL.		0.0–0.1	TS			Groundwater Not Encountered
Whangai Fm	Clayey SILT; light grey with orange mottling. Stiff to very stiff; moist; low plasticity.		0.1–1.0			144 / 55 (at ~0.5m); 187 / 55 (at ~1.0m)	
Whangai Fm	Completely weathered; extremely weak; MUDSTONE. - - Clayey sandy SILT; light blue/grey with green pockets. Very stiff; moist; low plasticity.		1.0–1.3				
	Completely weathered; extremely weak; MUDSTONE. - - Sandy SILT, with some clay; greenish/grey. Very stiff to hard; moist; low plasticity.		1.3–1.4				
	End Of Hole: 1.40m						

PHOTO(S)

REMARKS

Hand Auger UTP at 1.4m

WATER

- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE

- [x] Hand Auger
- [ ] Test Pit

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

HAND AUGER LOG

HOLE NO.: HA02

CLIENT: Mark Zeilstra
PROJECT: Geotechnical Investigations

JOB NO.: 19167

SITE LOCATION: 290 Orira Road Umawera
CO-ORDINATES: 1651388mE, 6092221mN
ELEVATION: 35.9m

START DATE: 26/06/2024
END DATE: 26/06/2024
LOGGED BY: RJ

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)	LEGEND	SCALA PENETROMETER (Blows / 0mm)	VANE SHEAR STRENGTH (kPa) Vane: GEO3603	WATER
TS	TOPSOIL.		0.0	TS	2 4 6 8 10 12 14 16 18	50 100 150 200 Values	Groundwater Not Encountered
Whangai Fm	Clayey SILT; grey, yellow, light brown. Very stiff; moist; low plasticity.		0.2			201+ -	
	Clayey SILT; yellow, light brown. Very stiff; moist; low plasticity.		0.4				
	Clayey sandy SILT; orange, blue, green. Stiff; moist; non-plastic; sand, fine to medium.		0.6			201+ -	
	Completely weathered; extremely weak; MUDSTONE. - - Clayey SILT, with trace sand; orange, lighr brown, grey. Very stiff; moist; non-plastic; sand, fine to medium.		0.8				
	Completely weathered; extremely weak; MUDSTONE. - - Clayey SILT, with trace sand and gravel; reddish. Very stiff; moist; non-plastic; sand, fine to medium, gravel, fine.		1.0			201+ -	
	Completely weathered; extremely weak; MUDSTONE. - - Clayey SILT, with trace sand and gravel; blue, green, grey. Very stiff; moist; non-plastic; sand, fine to medium, gravel, fine.		1.2				
	Completely weathered; extremely weak; MUDSTONE. - - SILT, with some clay, with trace sand and gravel; blue, green, grey, red. Very stiff; moist; non-plastic; sand, fine to medium, gravel, fine.		1.4			201+ -	
	End Of Hole: 2.30m		1.6				
			1.8				
			2.0			201+ -	
			2.2				
			2.4				
			2.6				
			2.8				
			3.0				
			3.2				
			3.4				
			3.6				
			3.8				
			4.0				
			4.2				
			4.4				
			4.6				
			4.8				
			5.0				
			5.2				

PHOTO(S)

REMARKS

Hand Auger UTP at 2.3m

WATER

- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE

- [x] Hand Auger
- [ ] Test Pit

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

HAND AUGER LOG

HOLE NO.: HA03

CLIENT: Mark Zeilstra
PROJECT: Geotechnical Investigations

JOB NO.: 19167

SITE LOCATION: 290 Orira Road Umawera
CO-ORDINATES: 1651385mE, 6092246mN
ELEVATION: 36.9m

START DATE: 26/06/2024
END DATE: 26/06/2024
LOGGED BY: CH

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)	LEGEND	SCALA PENETROMETER (Blows / 0mm)	VANE SHEAR STRENGTH (kPa) Vane: GEO3603	WATER
TS	TOPSOIL.		0.0	TS			
Whangai Fm	Clayey SILT; grey, orange, light brown . Stiff to very stiff; moist; low plasticity.		0.4			147 55	
	Completely weathered; extremely weak; MUDSTONE. Clayey sandy SILT; llight blue, grey. Very stiff; moist; low plasticity.		1.0			201 -	
	Completely weathered; extremely weak; MUDSTONE. Sandy SILT, with minor gravel; llight blue, grey. Very stiff; moist; low plasticity; gravel, fine to medium, angular.		1.4			201 -	
	Completely weathered; extremely weak; MUDSTONE. Clayey SILT, with minor sand and gravel; light blue, white, green intercolouring with minor streaks of purple. Very stiff; moist; low plasticity; gravel, fine to medium, angular.		2.0			201 -	Groundwater Not Encountered
	Completely weathered; extremely weak; MUDSTONE. Sandy SILT, with minor gravel; llight blue, grey. Very stiff; moist; low plasticity; gravel, fine to medium, angular.		2.2				
	End Of Hole: 2.30m		5.2				

Scala Penetrometer scale: 2 4 6 8 10 12 14 16 18
Vane Shear Strength scale: 50 100 150 200 Values

PHOTO(S)

REMARKS

Hand Auger UTP at 2.3m

WATER

- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE

- [x] Hand Auger
- [ ] Test Pit

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

HAND AUGER LOG

HOLE NO.: HA04

CLIENT: Mark Zeilstra
PROJECT: Geotechnical Investigations

JOB NO.: 19167

SITE LOCATION: 290 Orira Road Umawera
CO-ORDINATES: 1652248mE, 6091586mN
ELEVATION: 25.9m

START DATE: 26/06/2024
END DATE: 26/06/2024
LOGGED BY: CH

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)	LEGEND	SCALA PENETROMETER (Blows / 0mm)	VANE SHEAR STRENGTH (kPa) Vane: GEO3603	WATER
TS	TOPSOIL.		0.0	TS	2 4 6 8 10 12 14 16 18	50 100 150 200 Values	dwater Not Encou
Whangai Fr	Cemented SILT, White, Hard, Dry, Non-plastic.		0.4			UTP -	
	End Of Hole: 0.50m		0.6				

0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2

PHOTO(S)

REMARKS

Hand Auger UTP at 0.5m

WATER

- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE

- [x] Hand Auger
- [ ] Test Pit

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

HAND AUGER LOG

HOLE NO.: HA05

CLIENT: Mark Zeilstra
PROJECT: Geotechnical Investigations

JOB NO.: 19167

SITE LOCATION: 290 Orira Road Umawera
CO-ORDINATES: 1652265mE, 6091588mN
ELEVATION: 26.7m

START DATE: 26/06/2024
END DATE: 26/06/2024
LOGGED BY: CH

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)	LEGEND	SCALA PENETROMETER (Blows / 0mm)	VANE SHEAR STRENGTH (kPa) Vane: GEO3603	Values	WATER
TS	TOPSOIL.		0.0	TS				
Whangai Fm	Cemented SILT, White, Hard, Dry, Non-plastic.		0.2					
	Clayey SILT; orange and grey mottling. Stiff; moist; high plasticity.		0.4				158	
			0.6				14	
			0.8					26/06/2024
	Completely weathered; extremely weak; MUDSTONE. - - SILT, with some clay; white, light orange mottling. Very stiff; moist; low plasticity.		1.0				187	
			1.2				60	
			1.4				130	
	Completely weathered; extremely weak; MUDSTONE. - - SILT, with some clay; white, minor orange streaks. Very stiff; moist; low plasticity.		1.6				81	
			1.8					
	Completely weathered; extremely weak; MUDSTONE. - - SILT, with some clay; light grey. Very stiff; moist; low plasticity.		2.0				173	
			2.2				55	
			2.4				170	
			2.6				14	
	Completely weathered; extremely weak; MUDSTONE. - - SILT, with some clay; purplish, brown with orange mottling. Very stiff; moist; low plasticity.		2.8					
			3.0				201+	
	End Of Hole: 3.00m		3.2				-	
			3.4					
			3.6					
			3.8					
			4.0					
			4.2					
			4.4					
			4.6					
			4.8					
			5.0					
			5.2					

PHOTO(S)

REMARKS

WATER

- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE

- [x] Hand Auger
- [ ] Test Pit

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

HAND AUGER LOG

HOLE NO.: HA06

CLIENT: Mark Zeilstra
PROJECT: Geotechnical Investigations

JOB NO.: 19167

SITE LOCATION: 290 Orira Road Umawera
CO-ORDINATES: 1652253mE, 6091603mN
ELEVATION: 27m

START DATE: 26/06/2024
END DATE: 26/06/2024
LOGGED BY: RJ

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)
TS	TOPSOIL.		0.0
Whangai Fm	Cemented SILT, White, Hard, Dry, Non-plastic.		0.4
	Clayey SILT; grey, dark brown, orange. Stiff to very stiff; moist; low plasticity.		0.8
	Clayey SILT, with some organics; grey, dark brown, orange, black. Stiff to very stiff; moist; low plasticity.		1.2
	Completely weathered; extremely weak; MUDSTONE. - - Clayey SILT; grey, dark brown, orange. Stiff to very stiff; moist; low plasticity.		1.4
	End Of Hole: 4.00m		4.0

LEGEND: TS

SCALA PENETROMETER (Blows / 0mm): 2, 4, 6, 8, 10, 12, 14, 16, 18

VANE SHEAR STRENGTH (kPa), Vane: GEO3603: 50, 100, 150, 200

Values
UTP
-
201+
-
173
26
184
104
164
114
170
114
201+
-
201+
-

WATER: 26/06/2024

PHOTO(S)

REMARKS

WATER
- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE
- [x] Hand Auger
- [ ] Test Pit

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

HAND AUGER LOG

HOLE NO.: HA07

CLIENT: Mark Zeilstra
PROJECT: Geotechnical Investigations

JOB NO.: 19167

SITE LOCATION: 290 Orira Road Umawera
CO-ORDINATES: 1652153mE, 6091559mN
ELEVATION: 13.9m

START DATE: 26/06/2024
END DATE: 26/06/2024
LOGGED BY: RJ

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)	LEGEND	SCALA PENETROMETER (Blows / 0mm)	VANE SHEAR STRENGTH (kPa) Vane: GEO3603	WATER
TS	TOPSOIL.		0.0	TS			
	Cemented SILT, White, Hard, Dry, Non-plastic.		0.2				
	Clayey SILT; grey and orange mottling. Stiff to very stiff; moist; high plasticity.		0.4			201+ -	
	Clayey SILT; white and orange mottling. Stiff to very stiff; moist; high plasticity.		1.0			201+ -	
	Clayey SILT, with some sand; white and orange mottling. Stiff to very stiff; moist; high plasticity.		1.8			201+ -	
1Qa	Silty CLAY, with minor sand and gravel; white and orange mottling. Stiff; moist; high plasticity; sand, fine, gravel, fine.		2.4			158 115	
	Silty CLAY, with some gravel, with minor sand; light grey. Stiff; moist; high plasticity; gravel, fine, subangular; sand, fine.		3.0			190 83	
	Silty CLAY, with trace sand and gravel; dark grey. Very stiff; moist; high plasticity; sand, fine, gravel, fine, subangular.		3.6			170 121	26/06/2024
	Silty CLAY, with some carbonation orangics (wood), with trace sand and gravel; dark grey. Very stiff; moist; high plasticity; sand, fine, gravel, fine, subangular.		4.2			158 98	
	End Of Hole: 5.00m		5.0			201+ -	
			5.2			115 83	

PHOTO(S)

REMARKS

WATER
- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE
- [x] Hand Auger
- [ ] Test Pit

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

HAND AUGER LOG

HOLE NO.: HA08

CLIENT: Mark Zeilstra
PROJECT: Geotechnical Investigations

JOB NO.: 19167

SITE LOCATION: 290 Orira Road Umawera
CO-ORDINATES: 1652309mE, 6091505mN
ELEVATION: 22.6m

START DATE: 26/06/2024
END DATE: 26/06/2024
LOGGED BY: CH

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)	LEGEND
TS	TOPSOIL.		0.0	TS
Whangai Fm	Clayey SILT; white, orange mottling. Stiff; moist; high plasticity.		0.2	
			0.4	
			0.6	
	Completely weathered; extremely weak; MUDSTONE. - - SILT, with some clay; white, light orange mottling. Very stiff; moist; low plasticity.		0.8	
			1.0	
			1.2	
			1.4	
	End Of Hole: 1.40m		1.6	
			1.8	
			2.0	
			2.2	
			2.4	
			2.6	
			2.8	
			3.0	
			3.2	
			3.4	
			3.6	
			3.8	
			4.0	
			4.2	
			4.4	
			4.6	
			4.8	
			5.0	
			5.2	

SCALA PENETROMETER (Blows / 0mm)
2 4 6 8 10 12 14 16 18

VANE SHEAR STRENGTH (kPa)
Vane: GEO3603
50 100 150 200

Values
187
14
201+
-

WATER

PHOTO(S)

REMARKS

Hand Auger UTP at 1.4m

WATER
- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE
- [x] Hand Auger
- [ ] Test Pit

RS Eng Ltd
09 438 3273
office@RSEng.co.nz
2 Seaview Road,
Whangarei 0110

HAND AUGER LOG

HOLE NO.: HA09

CLIENT: Mark Zeilstra
PROJECT: Geotechnical Investigations

JOB NO.: 19167

SITE LOCATION: 290 Orira Road Umawera
CO-ORDINATES: 1652305mE, 6091493mN
ELEVATION: 22.4m

START DATE: 26/06/2024
END DATE: 26/06/2024
LOGGED BY: RJ

UNIT	MATERIAL DESCRIPTION (See Classification & Symbology sheet for details)	SAMPLES	DEPTH (m)	LEGEND	SCALA PENETROMETER (Blows / 0mm)	VANE SHEAR STRENGTH (kPa) Vane: GEO3603	Values	WATER
TS	TOPSOIL.		0.0	TS				
Whangai Fm	Silty SAND; white. Very dense; moist; dilatant.		0.2					
	Clayey SILT; orange, white mottling. Very stiff; moist; low plasticity.		0.4				201+	
	Completely weathered; extremely weak; MUDSTONE. - - SILT, with some clay, with trace sand; orange and white mottling. Very stiff; moist; low plasticity.		0.6 0.8 1.0 1.2				201+	
	Completely weathered; extremely weak; MUDSTONE. - - Silty CLAY, with trace sand; orange and white mottling. Very stiff; moist; low plasticity.		1.4 1.6 1.8 2.0 2.2				187 131 201+	26/06/2024
	Completely weathered; extremely weak; MUDSTONE. - - Silty CLAY, with trace sand; grey, white, orange, light brown. Very stiff; moist; low plasticity.		2.4 2.6 2.8				161 29	
	Completely weathered; extremely weak; MUDSTONE. - - Silty CLAY, with trace sand; blue, dark grey. Very stiff; moist; low plasticity.		3.0 3.2 3.4				201+	
	End Of Hole: 3.50m		3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2				201+	

PHOTO(S)

REMARKS

Too dense to Auger at 3.5m

WATER

- Standing Water Level
- Out flow
- In flow

INVESTIGATION TYPE

- [x] Hand Auger
- [ ] Test Pit

Appendix D

FNDC SEW1 Form

Appendix B ES-SEW1

Onsite Wastewater Disposal Investigation

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

Part A – Contact Details

1 - Applicant

Name: Mark Zeilstra

Property Address: Orira Road, Umawera

Lot/DP Number: PT SECTION S13 BLOCK VII MANGAMUKA SD, PT SECTION 11 BLOCK VII MANGAMUKA SD, & PT SECTION 11 BLOCK VII MANGAMUKA SD

2 - Consultant / Site Evaluator

Site Evaluator Name: Matthew Jacobson

Company Name: RS Eng Ltd

Postal Address: 2 Seaview Road, Whangarei, 0110

Business Phone: 094383273 Mobile:

Email: matthewj@rseng.co.nz

SQEP Registered[2]: ❑ Yes ❑ No If no, details of suitably registered SQEP who will countersign the report are to be supplied below.

Name of SQEP:

Company Name:

Postal Address:

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

Business Phone: _____ Mobile: _____

Email: _____

Part B - Site and Soil Evaluation

1: Desk Study

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

☐	FNDC REQUIREMENT	APPLIES TO LOT(S)	COMMENTS
1	**Hazard maps/GIS hazard layer - stability**		
☐	Low instability risk		
☐	Medium instability risk		
☐	High instability risk		
2	**GIS hazard layer – effluent on slope stability**		
☐	Low disposal potential		
☐	Moderate disposal potential		
☐	High disposal potential		
3	**GIS hazard layer – effluent suitability**		
☐	Medium unsuitability		
☐	High unsuitability		
4	**GIS hazard layer – flood susceptibility**		
☐	Is flood susceptible		
✓	Is partially flood susceptible	Lot 5 and 6	Low-lying area mapped flood susceptible, setback away from investigated effluent field
☐	Is not flood susceptible		
5	**GIS land resources layer - streams**		
Are there streams on or adjacent to land under investigation? ☐ Yes			
Are there streams on or adjacent to land under investigation? ✓ No			
6	**GIS land resources layer – aquifers at risk**		
Is land situated over or adjacent to aquifer? ☐ Yes			
Is land situated over or adjacent to aquifer? ✓ No			
7	**Annual Rainfall (HIRDS)**		

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

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

2: On-Site Evaluation

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

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

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

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

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

On-Site Evaluation Continued

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

☐	DETAILS	APPLIES TO SITE(S)
1	**Flooding potential to proposed field and reserve field (refer note 1 below)**	
✓	Fields will not flood, or	
	Fields will flood in	
	20% AEP event	
	5% AEP event	
	1% AEP event	
2	**Surface water separation to proposed field and reserve field (refer note 2 below)**	
✓	Main/reserve disposal field comply with NRC rules	
	Main/reserve disposal field do not comply with NRC rules	
3	**Surface water separation to proposed field and reserve field (refer note 2 below)**	
✓	Main/reserve disposal field comply with NRC rules	
	Main/reserve disposal field do not comply with NRC rules	
4	**Winter ground water separation to proposed field and reserve field (refer note 3 below)**	
✓	Main and reserve disposal field comply with NRC rules	
	Main and reserve disposal field do NOT comply with NRC rules	
5	**Slope of ground of proposed field and reserve field (refer note 4)**	
Description	All lots generally between 5° and 10° slope angles at investigated effluent field locations.	
6	**Shape of ground of proposed field and reserve field (Refer note 5 below)**	

✓	Waxing divergent		Linear divergent		Waning divergent
	Waxing planar	✓	Liner planar		Waning planar
	Waxing convergent		Linear convergent		Waning convergent

Comments	

☐	**DETAILS**	**APPLIES TO SITE(S)**
7	**Intended water supply source**	
☐	Public supply	
☑	Rainwater	All lots
☐	Bore	
8	**Proposed method of disposal and recommended Daily Loading rate (DLR) (refer note 6 below)**	
Description		
Secondary treatment loading to irrigation line using a loading rate of 2.0L/m²/day		
Peak loading factored in (refer not 6 below)	☐ Yes	☑ No
Comments	Not considered a holiday area as Note 6.	

9	**Site exposure (refer note 7 below)**	**Description**	**Applies to Site(s)**
Site(s) aspect		East and west facing	All lots
Pre-dominant wind direction			
Presence of shelter belts			
Presence of topographical features or structures			

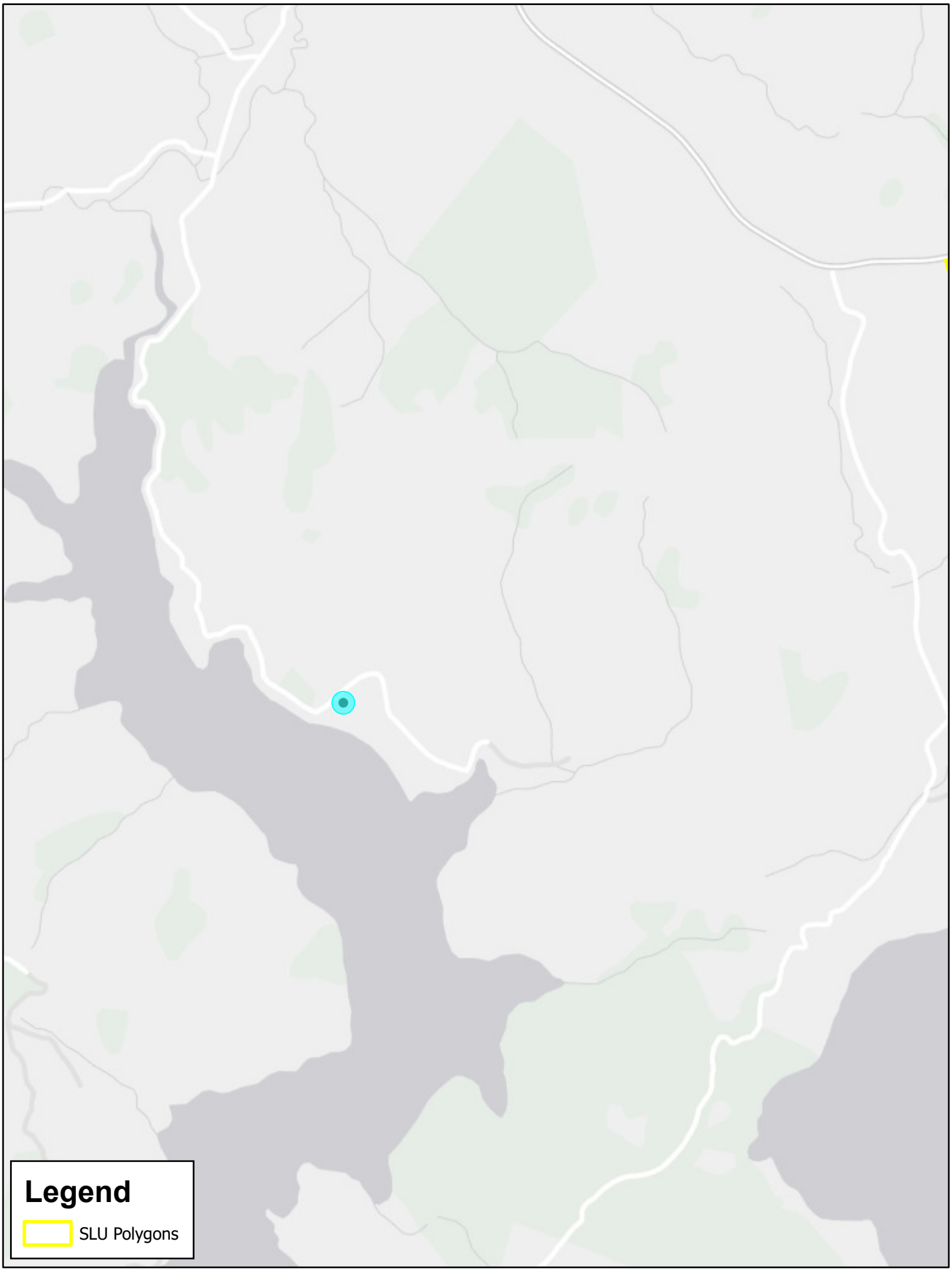
10	**Proximity of water bores (include adjacent to properties) (refer note 9 below)**
No registered water bore shown on NRC Maps near the proposed lots.	
11	**Visible evidence of slips / instability (refer not 8 below)**
Slope instability and soil creep evident on slopes of the lots, generally where slopes are >14°. Effluent fields are located on gentler slopes which convey no signs of instability or soil creep.	
12	**Total suitable area available for type of effluent disposal proposed (including reserve area)**
>732m² available for for the effluent disposal field including reserve area.	
13	**Setback areas proposed (if any) (refer note 10 below)**
As per NRC Permitted Discharge Compliance, refer to subdivision suitability report.	

Notes

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

APPENDIX 4

NRC SELECTED LAND USE REGISTER



Northland REGIONAL COUNCIL

NRC Maps

Projection NZTM. Datum NZTM2000.
DISCLAIMER:
The Northland Regional Council cannot guarantee that the information shown is accurate and should not be reused in any manner without proper consultation with its owner.

N

0 0.07 0.15 0.3 0.45
Kilometers

April 2 2024