

Application for resource consent or fast-track resource consent

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

1. Pre-Lodgement Meeting

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

2. Type of Consent being applied for

(more than one circle can be ticked):

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

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

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

Yes No

4. Consultation

Have you consulted with Iwi/Hapū? Yes No

If yes, which groups have you consulted with?

Who else have you consulted with?

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

5. Applicant Details

Name/s:

Michael Gilson and Joan McPhee C/- Cheshire Architects Limited - Sarah Gilbertson

Email:

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:

Melissa McGrath

Email:

Phone number:

Postal address:

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

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

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

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

Name/s:

Michael Gilson

**Property Address/
Location:**

Lot 4, Mataka Station, Rangihoua Road, Kerikeri

Postcode

0294

8. Application Site Details

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

Name/s:

**Site Address/
Location:**

Postcode

Legal Description:

Val Number:

Certificate of title:

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

Site visit requirements:

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

Is there a dog on the property? Yes No

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

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.

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

10. Would you like to request Public Notification?

Yes No

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

(more than one circle can be ticked):

- Building Consent
- Regional Council Consent (ref # if known)
- National Environmental Standard consent
- Other (please specify)

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

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

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

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

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

13. Assessment of Environmental Effects:

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

Your AEE is attached to this application Yes

13. Draft Conditions:

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

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

14. Billing Details:

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

Name/s: (please write in full)

Michael Gilson and Joan McPhee

Email:

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)

Michael F Gilson

Signature:

(signature of bill payer)



Date 3/3/2025

MANDATORY

15. Important Information:

Note to applicant

You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.

You may apply for 2 or more resource consents that are needed for the same activity on the same form. You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application

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

Privacy Information:

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

15. Important information continued...

Declaration

The information I have supplied with this application is true and complete to the best of my knowledge.

Name: (please write in full)

Signature:

Date

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

Checklist (please tick if information is provided)

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

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



Residential Unit and Minor Residential Unit

Land Use Consent Application

Lot 4, Mataka Station, Rangihoua Road, Kerikeri

Assessment of Environmental Effects and Statutory Analysis

29 January 2025

B&A

Urban & Environmental

Prepared for:
Michael Gilson and Joan McPhee

Cover Image: Dean Wright Photography

B&A Reference:

20626

Status:

Draft Revision 1 – Client Review and Written Approval from Neighbours

Date:

3 March 2025

Prepared by:



Melissa McGrath

Senior Associate, Barker & Associates Limited

Reviewed by:



David Badham

Partner, Barker & Associates Limited

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1.0 Applicant and Property Details

| | |
|---------------------------------|---|
| To: | Far North District Council |
| Site Address: | Lot 4, Mataka Station, Rangihoua Road, Kerikeri |
| Applicant Name: | Michael Gilson and Joan McPhee |
| Address for Service: | Barker & Associates Ltd PO Box 1986, Shortland Street, Auckland 1140 Attention: Melissa McGrath |
| Legal Description: | Lot 4 DP 323083 (refer to Record of Title as Appendix 1) |
| Site Area: | 57.4180ha |
| Site Owner: | Michael Gilson |
| District Plan: | Far North District Council Operative District Plan (ODP) Far North District Council Proposed District Plan (PDP) |
| ODP Zoning: | Rural Production Zone |
| PDP Zoning | Rural Production Zone |
| PDP Overlays & Controls: | Coastal Environment, High Natural Character, Outstanding Natural Landscape, River Flood Hazards Zone 10 Year ARI Event and 100 Year ARI Event. |
| Additional Limitations: | Nil |
| Locality Diagram: | Refer to Figure 1 |
| Brief Description of Proposal: | Land Use Consent to construct a principal dwelling and a minor dwelling with associated works. |
| Summary of Reasons for Consent: | Discretionary activities: Residential Intensity consent is sought for a principal and minor dwelling pursuant to rule 8.6.5.4. Buildings within 20m of the drip line of existing trees onsite and adjacent scrub consent is sought pursuant to rule 12.3.6. |

2.0 Introduction

This report has been prepared to address a resource consent application submitted by Michael Gilson and Joan McPhee for a principal residential unit and a minor residential unit at Lot 4 Mataka Station, Rangihoua Road, Kerikeri. This report is intended to address the relevant matters under the Resource Management Act 1991 ('RMA').

2.1 Background

The subject site is located within Mataka Station. Mataka Station has been comprehensively planned to establish large private lots with shared access and infrastructure servicing the whole property, including beaches, extensive coastline, conservation areas (comprising shrubland and wetland), stables, beach lodge, Mt Mataka and an extensive network of over 23 miles (38 kms) of private roads and hiking, riding and biking trails. Mataka Station is a unique sheep and cattle farm that has been farmed for over 100 years, managed by the Farm Manager and Residents Association.

Mataka Station is separated into individual freehold titles, with land and conservation covenants and consent notices managing use and development. With up to 30 homes enabled, each house location has been carefully selected, and quality of built form is managed via design guidelines to ensure overall quality and design integrity of individual houses and landscaping.

2.2 Pre-lodgement Consultation

As part of the design process consultation with the Mataka Station Residents Association and Mataka Design Committee has been on-going, and approval for the proposal has been obtained – see **Appendix 10** for evidence of approval.

Consultation with Ngati Rehia has commenced, the Applicant has undertaken discussions and a site visit with Matua Hugh Rihari who has been engaged to prepare a Cultural Impact Assessment.

3.0 Site Context

3.1 Site Description

The subject site is legally described as Lot 4 DP 323083, record of title reference 92524. Being comprised of 57.35ha of land, the site is irregularly shaped with undulating contour. The site is located within one of 26 approved house site lots situated at the end of Oihi Road on the Purerua Peninsula within an approximately 1,150ha property managed as a farm park. Large tracts of indigenous vegetation are located at the southern extent of the site, with pasture forming the central portion of the site.

The majority of Lot 4 is located within the more inland part of the property to the west of the main internal north-south access road, with approximately 4ha to the northeast identified as a "Designated House Site" on the title plan ("Site"). The designated house site is largely oriented towards the northern eastern coastal side of the peninsula, separated from the Coastal Marine Area (CMA) by Lot 3.

The designated house site contains two existing Norfolk Island Pines – one at approximately 7m high located near the top of the knoll at RL102m, and the other approximately 10m high located near the western boundary of the designated building Site and lot boundary. In addition, there is a cluster of 3 semi-mature Pohutukawa up to approximately 11m high located between the pines. The balance of the designated building Site contains pasture grasses and this area is currently grazed as part of the farming operation.



Figure 1: Locality plan.

3.2 Surrounding Locality

Mataka Station is located at the eastern extent of Purerua Peninsula, 32.5km north-east of Kerikeri. Rangihoua Heritage Park is located to the south of Mataka Station with Te Tii School being located 14.7km west inland.

The subject site is located within the rural farm, surrounded by large lots. The wider landscape within and surrounding Lot 4 has a predominantly large scale rural coastal character. The north eastern part of Mataka Station is characterised by either steep coastal slopes and escarpments to the east of a defining north south ridge system rolling pastoral farmland and indigenous bush / pine forest to the west.

4.0 Proposal

A summary of the key elements of the proposal is set out below, with detailed descriptions included in the supporting technical assessments and plans.

Residential development: The proposal includes the establishment of a 280m² principal dwelling and a 70m² minor dwelling. The main house is located on the northern side of a knoll with the minor dwelling located to the southeast of the high point of the knoll.

For both dwellings the proposal includes:

- Roof: Dark Grey Zinalume – LRV=25%
- Guttering and Spouting: Weathered Copper – LRV=9%
- Exterior Wall Cladding: Western Red Cedar Weatherboards – 18%
- All external cladding materials will be below an LRV of 30%.

The architectural plans are included in **Appendix 2**.

Infrastructure: The principal and minor dwellings will be serviced via onsite wastewater, water supply and stormwater management. PK Engineering have prepared a Geotechnical Report included in **Appendix 3** provides further detail and plans for stormwater management and wastewater disposal, in summary:

- Stormwater management: A central stormwater trench will be established to the south-west of the principal residential unit collecting stormwater from the principal residential unit and associated impervious areas directed to the north east of the site. Stormwater from the minor residential unit will be collected to a small 10,000L -15,000L water tank and then discharged via a solid Ø150 Upvc pipe to the outflow to the west
- Wastewater disposal: A single wastewater powerless secondary treatment system is proposed to service both the principal and minor dwellings, with 571 lineal metres of disposal field, sub-surface dripper irrigation lines proposed.

As detailed in the architectural plans (**Appendix 2**) onsite potable and fire fighting water supply is proposed:

- Potable water supply: 3 25,000 litre tanks will be buried with overflows.
- Firefighting water supply: One 25,000 litre tank will be buried.

Earthworks: Land disturbance of approximately 1416m³ cut/88.5m³ fill over an area of 23280m² is required to establish the principal dwelling building platform, foundations for the minor dwelling, access/parking area, stormwater management and wastewater disposal. PK Engineering have undertaken a Geotechnical Assessment of the proposal as detailed in **Appendix 3** and recommend specific designed foundations and a careful placement of stormwater and wastewater disposal.

Access and parking: A single gravel driveway is proposed service both principal and minor dwellings, being established to extend from the internal access road. A small parking area of approximately 300m² is proposed to be located to the west of the principal residential unit.

Vegetation Clearance: No clearance of indigenous vegetation is proposed.

Landscaping: Extensive landscape planting and maintenance is proposed in accordance with the Landscape Plans prepared by o2landscapes.com as detailed in **Appendix 4**.

5.0 Reasons for Consent

A rules assessment against the provisions of the Far North District Council Operative District Plan ('ODP') is attached as **Appendix 9**. The site is zoned Rural Production.

A rules assessment against the proposed Far North District Council Proposed District Plan ('PDP') is attached as **Appendix 9**. The site is proposed to be zoned Rural Production, with portions of the

site identified as Coastal Environment, Outstanding Natural Landscape, High Natural Character and River Flood Hazard 10 year and 100 year ARI Event Overlays. At the time of drafting this consent no decision had been issued, only those rules which have immediate legal effect have been considered.

The proposal requires consent for the matters outlined below.

5.1 Far North District Council Operative District Plan

Rural Production Zone

- Residential Intensity – The proposal seeks to establish a minor dwelling which is located further than 30m from the proposed principal residential unit infringing rule 8.6.5.2.3. Consent is sought pursuant to rule 8.6.5.4 Discretionary Activities. **Discretionary Activity.**

Natural Hazards

- Fire Risk to Residential Units – The proposal seeks to establish buildings within 20m of the drip line of existing trees onsite and adjacent scrub, infringing rule 12.4.6.1.2. Consent is sought pursuant to rule 12.3.6.3 Discretionary Activities. **Discretionary Activity.**

5.2 Far North District Council Proposed District Plan

No rules with immediate legal effect trigger reasons for consent in accordance with section 96F of the RMA.

5.3 National Environmental Standard – Contaminated Soils

The NES Contaminated Soils were gazetted on 13th October 2011 and took effect on 1st January 2012.

The standards are applicable if the land in question is, or has been, or is more likely than not to have been used for a hazardous activity or industry and the Applicant proposes to subdivide or change the use of the land, or disturb the soil, or remove or replace a fuel storage system.

The subject site is not mapped on Northland Regional Councils Selected Land Use register and there is no information that suggests that the sites have been used for any activities that are on the Hazardous Activities and Industry List (HAIL) or evidence of migration of hazardous substances from adjacent land use.

Based on the above, the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES-CS) does not apply to the proposal.

5.4 Activity Status

Overall, this application is for a discretionary activity.

6.0 Public Notification Assessment (Sections 95A, 95C and 95D)

6.1 Assessment of Steps 1 to 4 (Sections 95A)

Section 95A specifies the steps the council is to follow to determine whether an application is to be publicly notified. These are addressed in statutory order below.

6.1.1 Step 1: Mandatory public notification is required in certain circumstances

Step 1 requires public notification where this is requested by the Applicant; or the application is made jointly with an application to exchange of recreation reserved land under section 15AA of the Reserves Act 1977.

The above does not apply to the proposal.

6.1.2 Step 2: If not required by step 1, public notification precluded in certain circumstances

Step 2 describes that public notification is precluded where all applicable rules and national environmental standards preclude public notification; or where the application is for a controlled activity; or a restricted discretionary, discretionary or non-complying boundary activity.

In this case, the applicable rules do not preclude public notification, and the proposal is not a controlled activity or boundary activity. Therefore, public notification is not precluded.

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

Step 3 describes that where public notification is not precluded by step 2, it is required if the applicable rules or national environmental standards require public notification, or if the activity is likely to have adverse effects on the environment that are more than minor.

As noted under step 2 above, public notification is not precluded, and an assessment in accordance with section 95A is required, which is set out in the sections below. As described below, it is considered that any adverse effects will be less than minor.

6.1.4 Step 4: Public notification in special circumstances

If an application is not required to be publicly notified as a result of any of the previous steps, then the council is required to determine whether special circumstances exist that warrant it being publicly notified.

Special circumstances are those that are:

- Exceptional or unusual, but something less than extraordinary; or
- Outside of the common run of applications of this nature; or
- Circumstances which make notification desirable, notwithstanding the conclusion that the adverse effects will be no more than minor.

It is considered that there is nothing noteworthy about the proposal. It is therefore considered that the application cannot be described as being out of the ordinary or giving rise to special circumstances.

6.2 Section 95D Statutory Matters

In determining whether to publicly notify an application, section 95D specifies a council must decide whether an activity will have, or is likely to have, adverse effects on the environment that are more than minor.

In determining whether adverse effects are more than minor:

- Adverse effects on persons who own or occupy the land within which the activity will occur, or any land adjacent to that land, must be disregarded.

The land to be excluded from the assessment is listed in section 6.3 below.

- Adverse effects permitted by a rule in a plan or national environmental standard (the 'permitted baseline') may be disregarded.

In this case the following permitted baseline is considered relevant to this proposal:

The subject site is 57.4ha in area, as a permitted activity in accordance with 8.6.5.1.1 4 residential units could be established onsite, subject to compliance with relevant district wide rules and bulk and location rules. Any building located further than 20m from the drip line of any tree is a permitted activity in accordance with rule 12.4.6.1.2.

- Trade competition must be disregarded.

This is not considered to be a relevant matter in this case.

- The adverse effects on those persons who have provided their written approval must be disregarded.

Eloise Caswell and Donald Chandler as the owner/occupier of 148 Oihi Road, Te Ti being Lot 5 Mataka Station has provided their written approval to the proposal and therefore adverse effects on them have been disregarded.

The sections below set out an assessment in accordance with section 95D, including identification of adjacent properties and an assessment of adverse effects.

6.3 Land Excluded from the Assessment

In terms of the tests for public notification (but not for the purposes of limited notification or service of notice), the adjacent properties to be excluded from the assessment are shown in **Figure 2** below, and include:

- Lot 21 DP 323083 (Mataka Station);
- 148 Oihi Road, Te Ti being Lot 5 DP 323083 (Mataka Station); and
- Lot 3 DP 323083 (Mataka Station).



Figure 2: Adjacent properties in relation to subject site. Source: Emaps.

6.4 Assessment of Effects on the Wider Environment

The following sections set out an assessment of wider effects of the proposal, and it is considered that effects in relation to the following matters are relevant:

- Landscape, Character and Amenity Effects;
- Transportation;
- Infrastructure and Servicing;
- Land Disturbance and Construction Activities;
- Geotechnical Effects;
- Cultural Effects;
- Heritage Effects;
- Fire Risk Effects;
- Flood Effects; and
- Ecological Effects.

These matters are set out and discussed below.

6.4.1 Landscape, Character and Amenity Effects

The subject site is largely pasture forming part of the sider Mataka Station farm, the designated building site straddles a localised knoll (up to 120.5m above sea level) which is part of a north south oriented ridge which generally follows the access road to the lots in this northern part of Mataka Farm. Built development must be located within the building area identified on the Lands and Survey plan reference 5670/12 dated 24 February 2003 in accordance with consent notice

condition. Location of built form was carefully designed as part of the underlying subdivision, to ensure privacy and outlook of individual dwellings and to maintain the rural and coastal character of Mataka Station.

Private covenants of Mataka Station require land owners to design built form in accordance with design guidelines, all building design must be reviewed and approved by the Mataka Station Residents Association. The proposal has been presented to and approved by the Residents Association— see **Appendix 10**. The Mataka Station design guidelines have influenced the built form to establish, balanced and coherent design; built form that is subservient to the dominant topography of the immediate landscape, colour and material finish that is compatible with the immediate landscape context.

The proposed buildings are low lying, nestled within and blending into the existing landform. The principal dwelling is located on a knoll and will be visible from the coastal environment and lots 3 and 21 to the north and northwest. Existing large Pohutukawa with proposed landscape planting will frame the built form of the principal dwelling. The proposed minor dwelling is located towards the south eastern corner of the subject site, located below the knoll and is not visible from the coastal environment. Existing indigenous vegetation (located within Lot 6 and protected by covenant) forms a backdrop for the minor dwelling building, with proposed specimen trees will screen the built form to lot 5 to the south.

Boffa Miskell have prepared a Landscape Effects Assessment of the proposal, which has considered the proposal in relation to the surrounding environment, noting that the designated building site straddles the coastal environment boundary delineated in the Northland Regional Policy Statement and the proposed buildings each have a coastal aspect. This assessment recognises that the design of the buildings has been cognisant of the coastal landscape context and have been located and designed to ensure they can be well integrated into the Site and wider landscape. The buildings are of a modest size with low height and using natural materials with low reflectivity which are considered to be suitable for the rural / coastal landscape. The proposed planting of indigenous trees and shrubs will provide a backdrop to the buildings when viewed from the Coastal Marine Area, while offering a foreground perspective for views from the inland areas of the farm, including from existing dwellings and proposed building sites.

The Landscape Assessment concludes that:

“In summary it is considered that the proposal for Lot 4 at Mataka will result in an appropriate outcome, given its landscape context, the location and design of the proposed development and the landscape treatment, including planting, for the Site”.

Landscaping has been carefully designed to remediate proposed works and blend the proposed built form into the surrounding coastal/rural environment. Proposed landscaping and maintenance are detailed in the Landscape Plan prepared by O2 Landscapes and attached in **Appendix 4**.

On this basis it is considered that the effects of the proposal are considered to result in less than minor adverse effects on the landscape, character and amenity of the wider environment.

6.4.2 Transportation

The subject site is located within Mataka Station which is serviced by existing well established internal road network. A new metalled vehicle crossing and driveway is proposed being designed

to be consistent with the internal road network. Three car parks formed with gravel are proposed to be established onsite.

Given the low level of traffic within Mataka Station and the proposal being residential in nature it is considered that the proposed traffic movements will not result in adverse effects to the transport network.

Overall, it is considered that any adverse effects with respect to transportation will be less than minor.

6.4.3 Infrastructure and Servicing

The provision of three waters infrastructure to service the development has been considered in the Civil report prepared by PK Engineering. Due to geotechnical constraints of the site, PK Engineering have carefully designed stormwater and wastewater providing specific recommendations to ensure the proposed principal and minor dwellings can be adequately serviced. Their report and engineering plans are attached as **Appendix 3**. PK Engineering concludes:

“The chosen area of Lot 4 is suitable for future development provided the stormwater and wastewater flows can be managed as per the recommended data in this report. A suitably qualified and experienced geotechnical engineer must be engaged to design all the foundations for structures on Lot 4 and incorporate the recommendations for foundation designs in the report.”

On the basis of the assessment from PK Engineering, it is considered that the proposed development can be sufficiently serviced on site without resulting in any adverse effects on the surrounding environment.

Overall, it is considered that any adverse effects with respect to servicing related matters will be less than minor.

6.4.4 Land Disturbance and Construction Activities

Land disturbance of approximately 1416m³ cut/88.5m³ fill over an area of 23280m² is required to facilitate the works described in **Section 4**.

An erosion and sediment control plan for the proposed earthworks will be provided, anticipated to be required by conditions of consent, which will detail measures to minimise silt and sediment runoff during construction. Silt and sediment control measures are proposed to be implemented in accordance with the Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region (2016) for the duration of the activity.

On the basis of the above, it is considered that any adverse effects associated with silt and sediment runoff (and resulting effects on water quality) will be less than minor.

When having regard to the nature of the construction activities it is expected that the works will comply with the District Plan construction noise limits which specifically reference New Zealand Standard NZS 6803: 1999 “Acoustics - Construction Noise”. Any adverse construction noise effects would be temporary in nature.

There is sufficient space on the subject site to provide parking for construction vehicles. It is considered that traffic and parking capacity effects of the construction period will be less than minor and temporary in nature.

Overall, it is considered that any adverse construction effects will be less than minor.

6.4.5 Geotechnical Effects

The Geotechnical Report prepared by PK Engineering, included as **Appendix 3** sets out recommendations for management of earthworks and associated foundation design.

Foundation design of the buildings will be addressed via building consent and it is considered that conditions of consent ensuring compliance with the Geotechnical Report will ensure appropriate management of earthworks.

As previously discussed, PK Engineering have carefully designed stormwater management and wastewater disposal systems to manage stability onsite.

On the basis of the assessment from PK Engineering and subject to compliance with conditions of consent, it is considered that the subject site is suitable for the proposed development and will result in less than minor geotechnical effects.

6.4.6 Cultural Effects

The application site is not located within an identified and mapped area of cultural significance within the district plan and the regional plan does not identify recorded sites of significance to Māori within the subject site. Consultation with Ngati Rehia has commenced, the Applicant has undertaken discussions and a site visit with Matua Hugh Rihari who has been engaged to prepare a Cultural Impact Assessment.

6.4.7 Heritage Effects

The subject site is located north of the Rangihoua Heritage Park and Marsden Cross which is a recognised heritage area that is highly significant as the site of early, prolonged contact between Maori and Pakeha. Extensive archaeological surveys and assessments were undertaken in support of the Mataka Station subdivision and original consents, and these have confirmed that there are a number of archaeological sites on or in the vicinity of the project area including:

| NZAA Site Number | Site Type | Year Recorded, Revisited | Description |
|-------------------------|--------------------------------|---------------------------------|--|
| P04/267 | Midden | 1978 | Midden, mostly cockle |
| Q04/45 | Midden | 1978 | Midden, mostly cockle, sometimes dense; at base of spur in sandy bank at beach |
| Q04/46 | Terraces and possible palisade | 1978 | Y-shaped ridge with terraces and possible defensive feature |
| Q04/66 | Midden and oven | 1987, 2003 | Small oven and a shell midden, near small stream at N end beach |
| Q04/68 | Burial | 1987 | Cranium exposed. Area covered in rocks. Human remains reported to have been found in area. |

Sunrise Archaeology have undertaken an archaeological assessment (**Appendix 6**) of the project, which included a specific archaeological survey of the portion of Lot 4 DP 323083 where the work

is proposed. It was found that no sites are located within the proposed development area, and subsurface testing did not identify any subsurface archaeological material.

Based on the results of this survey, Sunrise Archaeology concluded that no Authority to modify or destroy an archaeological site was necessary, recommending that an Accidental Discovery Protocol (ADP) be put in place.

It is considered that the proposed mitigation measures will ensure that the potential for the proposal to have adverse effects on historic heritage will be less than minor subject to adherence ADP conditions of consent.

6.4.8 Fire Risk Effects

The proposed minor dwelling is located in proximity to existing indigenous vegetation located on the adjacent site. The Operative District Plan requires residential units to be separated from indigenous vegetation in isolated areas remote from fire fighting services for two purposes:

1. To reduce the risk of fire causing loss of life, severe damage to property; and
2. The risk of loss of indigenous vegetation and habitats of indigenous fauna.

The proposed minor dwelling maintains a separation of approximately 12m from the indigenous vegetation, and is serviced by a dedicated firefighting water supply. One 25,000 litre tank will be buried and located to the west of both the principal and minor dwellings. Landscape planting has been carefully designed with low fire risk plants being recommended in proximity to the proposed buildings.

For these reasons it is considered that the proposed mitigation measures will ensure that the potential fire risk effects will be less than minor.

6.4.9 Flooding Effects

Areas of the subject site are identified by Northland Regional Council and the Proposed District Plan as subject to 100 year Flood Risk. The areas of the site identified are separated from the proposed building area by internal access road and is over 200m from the proposed building platforms which will not be at any risk of inundation. It is considered that potential adverse flood effects will be less than minor.

6.4.10 Ecological Effects

The subject site is largely pasture with indigenous vegetation extending along the southern extent and waterways. The proposed buildings and associated work are physically separated by internal roads from the majority of the subject site. It is considered that potential adverse ecological effects will be less than minor.

6.5 Summary of Effects

Overall, it is considered that any adverse effects on the environment relating to this proposal will be less than minor and acceptable.

6.6 Public Notification Conclusion

Having undertaken the section 95A public notification tests, the following conclusions are reached:

- Under step 1, public notification is not mandatory;
- Under step 2, public notification is not precluded;
- Under step 3, public notification is not required as it is considered that the activity will result in less than minor adverse effects; and
- Under step 4, there are no special circumstances.

Therefore, based on the conclusions reached under steps 3 and 4, it is recommended that this application be processed without public notification.

7.0 Limited Notification Assessment (Sections 95B, 95E to 95G)

7.1 Assessment of Steps 1 to 4 (Sections 95B)

If the application is not publicly notified under section 95A, the council must follow the steps set out in section 95B to determine whether to limited notify the application. These steps are addressed in the statutory order below.

7.1.1 Step 1: Certain affected protected customary rights groups must be notified

Step 1 requires limited notification where there are any affected protected customary rights groups or customary marine title groups; or affected persons under a statutory acknowledgement affecting the land (being on land, or adjacent to land, that is subject to a statutory acknowledgement area).

The above does not apply to this proposal.

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

Step 2 describes that limited notification is precluded where all applicable rules and national environmental standards preclude limited notification; or the application is for a controlled activity (other than the subdivision of land).

In this case, the applicable rules do not preclude limited notification and the proposal is not a controlled activity. Therefore, limited notification is not precluded.

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

Step 3 requires that, where limited notification is not precluded under step 2 above, a determination must be made as to whether any of the following persons are affected persons:

- In the case of a boundary activity, an owner of an allotment with an infringed boundary;
- In the case of any other activity, a person affected in accordance with s95E.

The application is not for a boundary activity, and therefore an assessment in accordance with section 95E is required and is set out below.

Overall, it is considered that any adverse effects on persons will be less than minor, and accordingly, that no persons are adversely affected.

7.1.4 Step 4: Further notification in special circumstances

In addition to the findings of the previous steps, the council is also required to determine whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined as eligible for limited notification.

In this instance, having regard to the assessment in section 6.1.4 above, it is considered that special circumstances do not apply.

7.2 Section 95E Statutory Matters

If the application is not publicly notified, a council must decide if there are any affected persons and give limited notification to those persons. A person is affected if the effects of the activity on that person are minor or more than minor (but not less than minor).

In deciding who is an affected person under section 95E:

- Adverse effects permitted by a rule in a plan or national environmental standard (the 'permitted baseline') may be disregarded;
- Only those effects that relate to a matter of control or discretion can be considered (in the case of controlled or restricted discretionary activities); and
- The adverse effects on those persons who have provided their written approval must be disregarded.

These matters were addressed in section 6.2 above, and Eloise Caswell and Donald Chandler as the owner/occupier of 148 Oihi Road, Te Ti being Lot 5 Mataka Station has provided their written approval to the proposal.

Having regard to the above provisions, an assessment is provided below.

7.3 Assessment of Effects on Persons

Adverse effects in relation to amenity on persons are considered below.

Wider effects, were considered in section 6.4 above, and considered to be less than minor.

7.3.1 Persons at Lots 21 and 22 Mataka

These sites are located to the north-west of the subject site, these sites are large pastoral areas with specified building platforms well separated from the proposed buildings and works. The future building area located within Lot 21 has views of the subject site and the proposed buildings have been designed to orient away from Lot 21. Being low lying and nestled into the land form the proposed principal dwelling will not impose on the amenity of these sites.

7.3.2 Persons at Lot 3 Mataka Station

This site is located to the east of the subject site, the approved building platform is located to the north of the proposed buildings and works and oriented towards the sea. Being low lying and

nestled into the land form the proposed principal dwelling will not impose on the amenity of this site.

7.3.3 Persons at Lot 5 Mataka Station

Lot 5 is located to the south of the building area; land owners have provided written approval and effects have been disregarded.

7.3.4 Summary of Effects

Taking the above into account, it is considered that any adverse effects on persons at the aforementioned properties will be less than minor in relation to amenity effects. Wider effects, were assessed in section 6.4 above and are considered to be less than minor.

It is considered, therefore, that there are no adversely affected persons in relation to this proposal.

7.4 Limited Notification Conclusion

Having undertaken the section 95B limited notification tests, the following conclusions are reached:

- Under step 1, limited notification is not mandatory;
- Under step 2, limited notification is not precluded;
- Under step 3, limited notification is not required as it is considered that the activity will not result in any adversely affected persons; and
- Under step 4, there are no special circumstances.

Therefore, it is recommended that this application be processed without limited notification.

8.0 Consideration of Applications (Section 104)

8.1 Statutory Matters

Subject to Part 2 of the Act, when considering an application for resource consent and any submissions received, a council must, in accordance with section 104(1) of the Act have regard to:

- Any actual and potential effects on the environment of allowing the activity;
- Any relevant provisions of a national environmental standard, other regulations, national policy statement, a New Zealand coastal policy statement, a regional policy statement or proposed regional policy statement; a plan or proposed plan; and
- Any other matter a council considers relevant and reasonably necessary to determine the application.

As a discretionary activity, section 104B of the Act states that a council:

- (a) may grant or refuse the application; and
- (b) if it grants the application, may impose conditions under section 108.

8.2 Weighting of Proposed Plan Changes: Far North District Proposed District Plan

On the 27th July Far North District Council (**FNDC**) notified their Proposed District Plan (**PDP**).

Under the Proposed Far North District Plan, the subject site is zoned Rural Production Zone, Coastal Overlay and portions of the site are subject to the River Flood Hazard Overlay.

At the time of preparing this AEE, only rules identified as having immediate legal effect have been considered. This will remain the case until FNDC releases a decision on the Proposed Far North District Plan (this will occur once hearings have been completed).

9.0 Effects on the Environment (Section 104(1)(A))

Having regard to the actual and potential effects on the environment of the activity resulting from the proposal, it was concluded in the assessment above that any wider adverse effects relating to the proposal will be less than minor and that no persons would be adversely affected by the proposal.

Overall, it is considered that the proposal will have positive effects, and any actual and potential adverse effects on the environment of allowing the activity are acceptable.

10.0 District Plan and Statutory Documents (Section 104(1)(B))

10.1 Objectives and Policies of the Operative District Plan

10.1.1 Chapter 8.6 Rural Production Zone

The rural production zone applies to the majority of land within the district, and seeks to enable the continuation of a wide range of activities for existing and future activities that are compatible with the productive purpose of the zone.

The objectives and policies of the zone seek to provide for a wide range of activities, while managing the effects of activities that are incompatible with the rural production zone. Policy 8.6.4.4 states that the type, scale and intensity of development allowed shall have regard to the maintenance and enhancement of amenity values of the zone. The proposal seeks to establish modest built form comprised of a principal and minor dwelling, located within a designated building site which has been selected to ensure the maintenance and enhancement of the amenity of the wider Mataka Station. The subject site is 57.6ha in area which could comfortably accommodate two dwellings as a permitted activity, as such the proposal is of a scale and intensity provided for and enabled within the Rural Production Zone.

The design of the underlying subdivision, allocation of designated building sites and operation of the Mataka Station farm has ensured appropriate separation of activities to avoid conflicting land use and potential reverse sensitivity and the efficient use of land. The proposal will comply with all consent notice requirements and adhere to the Mataka Station guidelines (private covenants), giving effect to policies 8.6.4.4, 8.6.4.5, and 8.6.4.8.

In conclusion, the proposed activity is considered to be consistent with the outcomes of the zone and will give effect to the relevant objectives and policies.

10.1.2 Chapter 10 Coastal Environment

Whilst the subject site is not zoned or identified as coastal environment under the ODP, it has been identified as subject to the coastal environment under the Northland Regional Policy Statement. The general Coastal Environment objectives and policies of Chapter 10 seek to manage coastal areas in a manner that avoids adverse effects from subdivision, use and development and preserve or enhance:

- (a) the natural character of the coastline and coastal environment;*
- (b) areas of significant indigenous vegetation and significant habitats of indigenous fauna;*
- (c) outstanding landscapes and natural features;*
- (d) the open space and amenity values of the coastal environment;*
- (e) water quality and soil conservation (insofar as it is within the jurisdiction of the Council).*

The subject site is not located within an identified area of natural character, outstanding landscapes or natural features. The dedicated building site does not contain areas of significant indigenous vegetation or habitats. The proximity of the development to the coastal environment and the surrounding rural/coastal character have been considered when designing the proposal, with the design of the buildings being cognisant of the coastal landscape context and the location of buildings being selected to ensure they can be well integrated into the Site and wider landscape. The buildings are a modest size with low height and using natural materials with low reflectivity which are considered to be suitable for the rural / coastal landscape. The proposed planting of indigenous trees and shrubs will provide a backdrop to the buildings when viewed from the Coastal Marine Area, while offering a foreground perspective for views from the inland areas of the farm, including from existing dwellings and proposed building sites.

For these reasons it is considered that the proposal will give effect to the relevant objectives and policies of the Coastal Environment Chapter.

10.1.3 Chapter 12.2 Indigenous Flora and Fauna

The objectives and policies of Indigenous Flora and Fauna Chapter seek to maintain and enhance the life supporting capacity of ecosystems and the extent and representativeness of the District's indigenous biological diversity, and to provide for the protection of, and to promote the active management of areas of significant indigenous vegetation and significant habitats of indigenous fauna. The proposal will not result in the loss of any indigenous flora and fauna, the proposed landscaping has been designed to enhance the surrounding coastal environment as such the proposal is considered to give effect to these objectives and policies.

10.1.4 Chapter 12.3 Soils and Minerals

The objectives and policies of the Soils and Minerals Chapter seek to maintain the life supporting capacity of soils and avoid, remedy or mitigate adverse effects associated with soil excavation or filling. The proposed earthworks will comply with the permitted activity standards of the District Plan, proposed works will be completed in accordance, therefore it is considered that the proposal will give effect to these policies.

10.1.5 Chapter 12.4 Natural Hazards

The objectives and policies of the natural hazards chapter are contained within Chapter 12.4 of the ODP and seek to reduce the threat of natural hazards to life, property and the environment. Areas of the subject site are identified as flood hazard, however, these are not located within the designated building site. Therefore, potential fire risk is the only natural hazard considered to be relevant to the proposal and the following to be applicable:

Objective 12.4.3.7 To avoid fire risk arising from the location of residential units in close proximity to trees, or in areas not near fire services

Policy 12.4.4.7 That the risk to adjoining vegetation and properties arising from fires is avoided.

The proposed development will avoid fire risk arising from the proposed development, because a separation of 12m from the indigenous vegetation will be established for the minor dwelling, the proposed dwellings will be serviced by a dedicated firefighting water supply which can be utilised to mitigate any risk to adjoining vegetation, and Landscape planting has been carefully designed with low fire risk plants being recommended in proximity to the proposed buildings. For these reasons it is considered that the proposal will be consistent with 12.4.3.7 and 12.4.4.7 and the proposal is considered consistent with the intent of the natural hazards chapter.

10.1.6 Chapter 12.5 Heritage

The objectives and policies of the Heritage Chapter seek to:

- protect and retain the heritage values of resources, such values to include those of an archaeological, architectural, cultural, historic, scientific, and technological nature.
- protect waahi tapu and other sites of spiritual, cultural or historical significance to Maori from inappropriate use, development and subdivision.
- protect the notable trees of the District.
- conserve the historic and amenity values of settlements with significant historic character.
- protect the cultural, spiritual, scientific and historic values of archaeological sites from inappropriate use, development and subdivision.
- ensure that subdivision and land use management practices avoid adverse effects on heritage values and resources.

The subject site is not identified as containing heritage sites or areas under the ODP. The Archaeological assessment has confirmed that no sites are located within the proposed development area, and subsurface testing did not identify any subsurface archaeological material. The applicant proposes to apply an ADP during construction to ensure on-going management of potential effect to unidentified archaeology. Therefore, it is considered that the proposal will not result in adverse effects on heritage values or resources and the proposal will give effect to these objectives and policies.

10.1.7 Chapter 15 Transportation

- 10.1.8 The Transportation Chapter seeks to minimise the adverse effects of traffic on the natural and physical environment, providing sufficient parking spaces, ensure that appropriate provision is made for on-site car parking for all activities, while considering safe cycling and pedestrian access

and use of the site, ensure that appropriate and efficient provision is made for loading and access for activities and to promote safe and efficient movement and circulation of vehicular, cycle and pedestrian traffic, including for those with disabilities.

The proposed principal and minor dwellings will be accessed via the existing internal road network within Mataka Station, with a single driveway and small parking space being established to service both dwellings. The proposal complies with the permitted standards of the ODP. For these reasons the proposal is considered to give effect to the relevant objectives and policies of this Chapter.

10.2 Objectives and Policies of the Proposed Far North District Plan

10.2.1 Strategic Direction

The proposed Strategic Direction Chapter seeks to set out the overarching direction for the district, focused upon historic and cultural wellbeing, economic and social wellbeing, urban form and development, infrastructure and electricity, rural environment and natural environment. Objectives are proposed, being high level and general, no policies are included in this Chapter.

It is considered that the proposal will give effect to the relevant policies of the plan and therefore will implement the relevant Strategic Direction objectives.

10.2.2 Infrastructure Chapter

The proposed Infrastructure Chapter objectives and policies seek to ensure that the district has safe, efficient and resilient infrastructure and the adverse effects of infrastructure are managed through the design and location of infrastructure to minimise the adverse effects on areas with historical and cultural values, natural values and coastal values.

The proposal includes the provision of onsite wastewater, stormwater and water infrastructure to service the principal and minor dwellings. All services have been designed to comply with relevant standard and best practice. Location of services will ensure that no adverse effects will occur to historic, cultural, natural or coastal values of the site.

10.2.3 Transport Chapter

The proposed Transport Chapter objectives and policies seek to ensure that land use and all modes of transport are integrated, the transport network is designed to minimise the adverse effects on areas with historical and cultural values, natural values and coastal values, and parking, loading and access provisions support the needs of land use and subdivision activities, and ensure safe and efficient operation for users.

The proposed principal and minor dwellings will be accessed via the existing internal road network within Mataka Station, with a single driveway and small parking space being established to service both dwellings providing safe and efficient access to the proposed dwellings. For these reasons the proposal is considered to give effect to the relevant objectives and policies of this Chapter.

10.2.4 Natural Hazards Chapter

The proposed Natural Hazards Chapter objectives and policies seek to ensure that the risks from natural hazards to people, infrastructure and property are managed, including taking into account the likely long-term effects of climate change, to ensure the health, safety and resilience of communities and that land use and subdivision does not increase the risk from natural hazards or

risks are mitigated, and existing risks are reduced where there are practicable opportunities to do so. Proposed policy NH-P9 Wildfire is particularly relevant to the proposal:

NH-P9 Manage land use and subdivision that may be susceptible to wildfire risk by requiring:

- a. setbacks from any contiguous scrub or shrubland, woodlot or forestry;*
- b. access for emergency vehicles; and*
- c. sufficient accessible water supply for firefighting purposes.*

The proposed development will ensure separation of the buildings from the indigenous vegetation, adequate access for emergency vehicles is provided and a dedicated firefighting water supply will be provided onsite. The proposal is considered to give effect to policy NH-P 9 and is consistent with the intent of the Natural Hazards Chapter.

10.2.5 Historic Heritage Chapter

The subject site is not identified as containing proposed heritage sites or areas under the PDP. As previously discussed, the archaeological assessment has confirmed that no sites are located and the Applicant proposes to apply an ADP during construction to ensure on-going management of potential effect to unidentified archaeology. Therefore, it is considered that the proposal will not result in adverse effects on heritage values or resources and the proposal will give effect to these objectives and policies.

10.2.6 Ecosystems and Indigenous Biodiversity Chapter

The proposed objectives and policies of this chapter seek to manage indigenous biodiversity to maintain its extent and diversity, protect areas of significant indigenous vegetation and habitats, recognise and provide for the relationship of tangata whenua and indigenous biodiversity and recognise their role as kaitiaki and to promote and enable the restoration and enhancement of indigenous biodiversity. The proposal will not result in the loss of any indigenous flora and fauna, the proposed landscaping has been designed to enhance the surrounding coastal environment as such the proposal is considered to give effect to these objectives and policies.

10.2.7 Coastal Environment Chapter

The proposed objectives and policies of this chapter seek to identify and manage the natural character of the coastal environment, to ensure its long-term preservation and protection, and that land use and subdivision:

- a. preserves the characteristics and qualities of the natural character of the coastal environment;
- b. is consistent with the surrounding land use;
- c. does not result in urban sprawl occurring outside of urban zones;
- d. promotes restoration and enhancement of the natural character of the coastal environment; and
- e. recognises tangata whenua needs for ancestral use of whenua Māori.

The subject site is proposed to be located within the Coastal Environment Overlay, and the designated building site is located outside of proposed areas of natural character, outstanding landscapes or natural features. The proposed buildings have been designed cognisant of the coastal landscape context and the location of buildings has been selected to ensure they can be well integrated into the Site and wider landscape. The buildings are a modest size with low height

and using natural materials with low reflectivity which are considered to be suitable for the rural / coastal landscape. The proposed planting of indigenous trees and shrubs will provide a backdrop to the buildings when viewed from the Coastal Marine Area, while offering a foreground perspective for views from the inland areas of the farm, including from existing dwellings and proposed building sites. For these reasons it is considered that the proposal will give effect to the relevant objectives and policies of the Coastal Environment Chapter.

10.2.8 Earthworks Chapter

The proposed objectives and policies of the Earthworks Chapter seek to enable earthworks where they are required to facilitate the efficient subdivision and development of land, while managing adverse effects on waterbodies, the coastal marine area, public safety, surrounding land and infrastructure and that earthworks are appropriately designed, located and managed to protect historical and cultural values, natural environmental values, preserve amenity and safeguard the life-supporting capacity of soils. The proposed earthworks will comply with the permitted activity standards of the District Plan, proposed works will be completed in accordance, therefore it is considered that the proposal will give effect to these policies.

10.2.9 Rural Production Zone

The proposed objectives and policies of the Rural Production Zone seek to ensure that the zone is managed to ensure its availability for primary production activities and its long-term protection for current and future generations, ensure that the zone is use for primary production activities, ancillary activities that support primary production and other compatible activities that have a functional need to be located in the zone and the rural character and amenity associated with a rural working environment is maintained. That land use and subdivision in the Rural Production zone:

- a. protects highly productive land from sterilisation and enables it to be used for more productive forms of primary production;
- b. protects primary production activities from reverse sensitivity effects that may constrain their effective and efficient operation;
- c. does not compromise the use of land for farming activities, particularly on highly productive land;
- d. does not exacerbate any natural hazards; and
- e. is able to be serviced by on-site infrastructure.

The proposal seeks to establish modest built form comprised of a principal and minor dwelling, located within a designated building site which has been selected to ensure the maintenance and enhancement of the amenity of the wider Mataka Station. The site forms part of an operational farm within Mataka Station, and the design of the underlying subdivision, allocation of designated building sites protects the ongoing farm management and will avoid constraint of farming activities. For these reasons it is considered that the proposal will give effect to these objectives and policies.

10.3 Regional Policy Statement for Northland (RPS)

The operative Regional Policy Statement (RPS) for Northland contains high level policy guidance for development within the region and is the vehicle for identifying and dealing with significant resource management issues in Te Taitokerau Northland. With respect to the coastal environment, it contains objectives and policies which seek to protect and preserve the natural character of the coastal environment, whilst safeguarding the integrity, form, function and resilience of the coastal environment from natural hazards and protect significant indigenous biodiversity and habitats from inappropriate subdivision, use and development.

Objectives range from integrated catchment management, improvement of overall quality of Northland's water quality, maintaining ecological flows, protecting areas of significant indigenous ecosystems and biodiversity, sustainable management of natural and physical resources in a way that is attractive for business and investment that will improve the economic wellbeing. enabling economic wellbeing, regional form, the role of tangata whenua kaitiaki role is recognised and provided for in decision making, risks and impacts of natural hazards are minimised, outstanding natural landscapes and features and historic heritage are protected from inappropriate subdivision, use and development.

Relevant policy has been identified and summarised as follows:

- Policy 4.4.1 seeks to avoid, remedy or mitigate adverse effects and of subdivision, use and development so they are no more than minor on indigenous taxa, indigenous vegetations and habitats of indigenous fauna that are significant using Appendix 5, and avoid, remedy or mitigate adverse effects of subdivision, use and development. The proposal will not result in the loss of any indigenous vegetation or habitat.
- Within the coastal environment, policy 4.6.1 seeks to avoid adverse effects of subdivision use, and development on the characteristics and qualities which make up the outstanding values of areas of outstanding natural character, outstanding natural features and outstanding natural landscapes, and outside of the coastal environment the policy seeks to avoid significant adverse effects. The proposal has been carefully designed to fit within the character of the rural/coastal environment.
- Policy 4.6.2 seeks to protect the integrity of historic heritage that have been identified in plans by avoiding significant adverse effects of subdivision, use and development. The subject site is not located within an area identified as historic heritage and the archaeological assessment has confirmed that there are no sites within the proposed development.
- Policy 5.1.1 seeks to provide for subdivision, use and development that is located, designed and built in a planned and co-ordinated matter. The proposed development is located within an existing subdivision that has been comprehensively designed.
- Policy 5.1.3 seeks to avoid the adverse effects, including reverse sensitivity effects of new subdivision, use and development, particularly residential development on, (a) primary production activities in the primary production zone. The design of the underlying subdivision with designated building site ensures that potential reverse sensitivity effects of the proposed development will be avoided.

- Policy 7.1.1 subdivision, use and development of land will be managed to minimise risks of natural hazards. The designated building site is not identified as subject to natural hazards, earthworks, stormwater and wastewater disposal have been designed to ensure stability of the site and proposed buildings. Separation, onsite water supply and landscape design will avoid potential wild fire risk.
- Policy 8.1.2 requires district council to recognise and provide for the relationship of tangata whenua and their culture and traditions, have particular regard to kaitiakitanga and take into account the principles of the Treaty of Waitangi including partnership when processing resource consents. The Applicant will have regard to kaitiakitanga and the principles of the Treaty of Waitangi, undertaking consultation and engagement with Ngati Rehia.

For these reasons, it is considered that the proposal is consistent with the relevant RPS provisions.

10.4 Objectives and Policies of the New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement (NZCPS), sets out objectives and policies in order to achieve the purpose of the RMA in regards to the coastal environment of New Zealand. It contains objectives and policies which include those aimed at safeguarding the integrity, form, functioning and resilience of the coastal environment and sustaining its ecosystems, and preserving the natural character of the coastal environment.

Of particular relevance to this proposal are objective 6 and policy 6 which recognises that the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms within appropriate limits. Policy 6 requires the consideration of:

- where and how built development on land should be controlled so that it does not compromise activities of national or regional importance that have a functional need to locate and operate in the coastal marine area
- where development that maintains the character of the existing built environment should be encouraged, and where development resulting in a change in character would be acceptable
- how adverse visual impacts of development can be avoided in areas sensitive to such effects, such as headlands and prominent ridgelines, and as far as practicable and reasonable apply controls or conditions to avoid those effects
- the set back development from the coastal marine area and other water bodies, where practicable and reasonable, to protect the natural character, open space, public access and amenity values of the coastal environment.

As previously discussed, the proposal has been carefully designed to maintain setback from the Coastal Marine Area, built scale, form and design with landscaping will ensure that the propose will maintain the coastal/rural character of the environment. For these reasons it is considered that the proposal is aligned with the outcomes sought by the NZCPS.

10.5 National Policy Statement for Highly Productive Land

The National Policy Statement for Highly Productive Land (NPS-HPL) seeks to protect highly productive land for use in land-based primary production. The NPS-HPL applies to land zoned

general rural or rural production zone and is identified as LUC 1, 2 or 3¹. The subject site is identified as LUC 5 and 6 and is therefore not subject to the NPS-HPL.

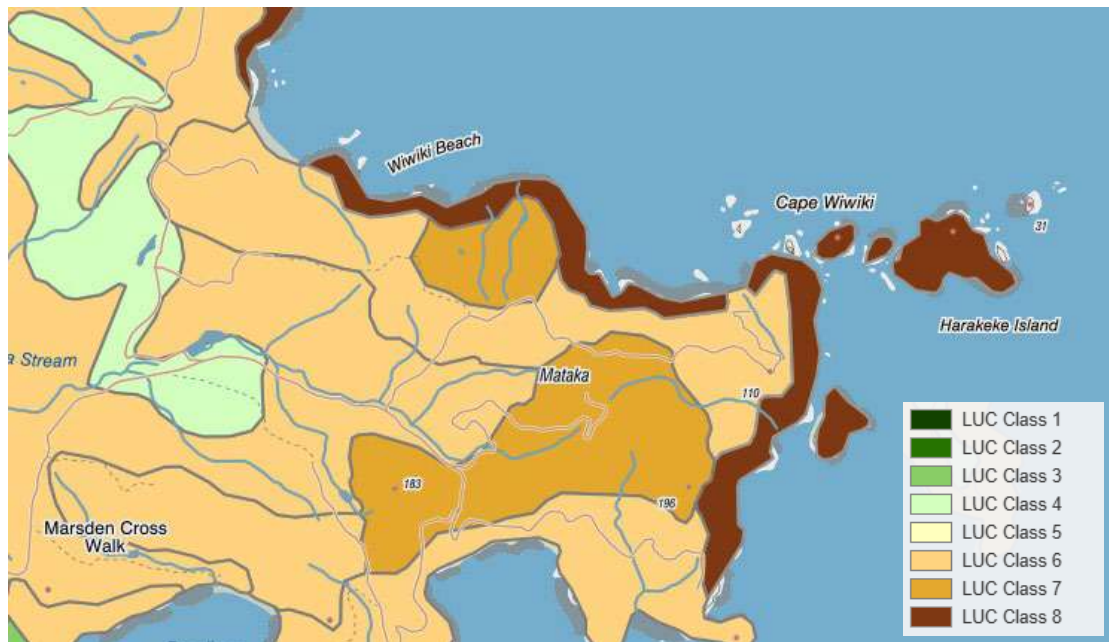


Figure 3: LUC Mapping. Source: Landcare Research Our Environment Website.

10.6 Summary

It is considered that the proposed development is generally in accordance with the objectives and policies of the ODP, PDP, RPS and NZCPS.

11.0 Relevant Rules and Assessment Criteria

The ODP specifies the relevant assessment criteria to be considered in assessing this application for each of the consent matters in the following sections:

- Natural Hazards 12.4.7 Assessment Criteria.

These criteria largely cover the same matters that have been discussed and assessed in the above report, pertaining to environmental effects and the objectives and policies of the ODP

Overall, it is considered that the proposal meets the assessment criteria of the ODP for the reasons described in sections 6, 7, 9, and 10 above.

12.0 Part 2 Matters

While it is not necessary to take recourse to Part 2 given that it has already been incorporated into the ODP, PDP, we do so for completeness.

Section 5 of Part 2 identifies the purpose of the RMA as being the sustainable management of natural and physical resources. This means managing the use, development and protection of

¹ NPS-HPL clause 3.5.7

natural and physical resources in a way that enables people and communities to provide for their social, cultural and economic well-being and health and safety while sustaining those resources for future generations, protecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

Section 6 of the Act sets out a number of matters of national importance including (but not limited to) the protection of outstanding natural features and landscapes and historic heritage from inappropriate subdivision, use and development.

Section 7 identifies a number of “other matters” to be given particular regard by Council and includes (but is not limited to) Kaitiakitanga, the efficient use of natural and physical resources, the maintenance and enhancement of amenity values, and maintenance and enhancement of the quality of the environment.

Section 8 requires Council to take into account the principles of the Treaty of Waitangi.

Overall, as the effects of the proposal are considered to be less than minor, and the proposal accords with the relevant OPD, PDP and RPS objectives and policies, it is considered that the proposal will not offend against the general resource management principles set out in Part 2 of the Act.

13.0 Other Matters (Section 104(1)(C))

13.1 Record of Title Interests

The Record of Title for the site are subject to a number of interests (refer **Appendix 1**).

Table 1: Record of Title interests

| Legal Description | Identifier | Area | Interests |
|-------------------|------------|------------------|---|
| Lot 4 DP 543930 | 92524 | 57.4180 Hectares | Land Covenant – 5667663.9 Encumbrance – 5725412.3 Land Covenant Partial revocation – 6447651.4 Land Covenant – 6447651.10 Easement Instrument – 5667663.8 Easement Instrument – 5667663.10 Consent Notice – 5667663.5 |

13.2 Consent Notices

Consent notice 5667663.5 consists of 12 conditions, with those relevant to the subject site addressed below.

In relation to all lots

1. Prior to any earthworks commencing on the site the registered proprietor of a lot or part thereof (“registered proprietor”) shall advise Iwi that such earthworks are commencing and invite Iwi to be present during such work. If during earthworks, any Koiwi or other archaeological remains are uncovered, works shall and the Iwi and the New Zealand Historic Place Trust shall be advised immediately.

Comment: The Applicant has been communicating with Ngati Rehia. This condition will be adhered to.

2. The registered proprietor shall procure that Mataka Limited shall carry out archaeological survey and assessment work by an appropriately qualified archaeologist in order to:
 - a. Identify and record Pa sites and associated features on Mataka Station;
 - b. Relocate previously recorded archaeological sites and record the current state and location of such sites where possible;
 - c. Accurately transpose the location of surveyed sites to updated plans, including where possible GPS positions.

The archaeological survey and assessment are to be completed within 1 year of the issue of a certificate under Section 224 of the Act and upon completion of the archaeological survey and assessment copies of such survey and assessment are to be forwarded to the Historic Places Trust and the Far North District Council. Each registered proprietor may fulfil the obligation contained in this condition by entering into a contract with Mataka Limited to comply with this condition.

Comment: Various archaeological surveys have been completed within this site. In support of this application Sunrise Archaeology have undertaken an archaeological assessment of the project, which included a specific archaeological survey of the portion of Lot 4 DP 323083 where the work is proposed. It was found that no sites are located within the proposed development area, and subsurface testing did not identify any subsurface archaeological material.

3. The registered proprietor shall ensure that the rules of the Mataka Residents Association Incorporated shall include covenants providing for registered proprietors of lots to be notified of the archaeological records affecting the lot purchased by each such registered proprietor, prohibiting the destruction of any archaeological site in contravention of the Historic Places Act 1993, and requiring the registered proprietor to undertake prior archaeological assessment when undertaking any earthworks near a recorded site. The registered proprietor shall ensure that such rules shall also prohibit the keeping of cats and mustelids. The keeping of dogs shall be limited to a maximum of 2 per lot which must be confined (by way of an escape proof enclosure) to the registered proprietor's exclusive use area, except when in the company of that registered proprietor (or other invitee) and then on a leash at all times

Comment: The Applicant has adhered to this condition.

4. The registered proprietor of each lot on deposited plan 323083 may erect one (1) dwelling house together with accessory buildings, including water storage facilities, except as may be provided by a subsequent resource consent or where the provisions of the District Plan applicable to the lot allow any additional building as a permitted activity. The dwelling houses and accessory buildings shall be located as shown on the Lands and Survey plan reference 5670/12 dated 24 February 2003 and shall be consistent with the relevant design criteria in the applicable District Plan.

Comment: One dwelling house and accessory buildings, a minor household unit is a controlled activity in the Rural Production zone, additional dwellings would require resource consent. Approval of this application will ensure compliance with this condition.

5. No building development may be located less than 10 metres from any archaeological sites, details of which are contained in the Architage Reports prepared by Diane Harlow dated November 2000 and May 2002

Comment: There are no archaeological sites identified on Lot 4.

6. All electricity, telecommunication and other utility services shall be underground, save that the electricity supplied to each lot may be supplied from an overhead supply existing as at the date of this consent notice.

Comment: The proposal has been designed to comply with this condition.

7. Any earthworks including those required to construct accessways to building sites shall be so designed to cause minimal impacts on the landscape and any exposed cuts shall be regrassed or planted in native vegetation.

Comment: The proposed works, landscaping and on-going maintenance have been designed to comply with this condition.

8. An effective Possum Control and Goat Eradication Program shall be established in consultation with and to the satisfaction of the Environmental Services Manager of the Far North District Council and thereafter shall be maintained by or on behalf of the registered proprietors of each of the lots on deposited plan 323083 at Mataka Station to minimise damage to existing and regenerating indigenous vegetation. In December of each year, the registered proprietor of each of the lots on deposited plan 323083 at Mataka Station or the Mataka Residents Association Incorporated shall provide a report to the Environmental Services Manager on the Possum and Goat Eradication Programme that has been done on such registered proprietor's lot by reference to that approved Eradication Programme. It is acknowledged that registered proprietors may discharge such obligations through the Possum Control and Goat Eradication Programme approved by the Environmental Services Manager and undertaken by the Mataka Residents Association.

Comment: The Applicant will comply with this condition.

9. All conservation areas as shown on a lot on deposited plan 323083 shall be preserved by the registered proprietor of that lot, and the registered proprietor shall not, without the written approval of the Council, and then only in strict compliance with any of the conditions imposed by the Council, cut down, damage or destroy any of such conservation areas or suffer or permit the cutting down, damaging or destruction of the trees, bush or other areas comprising the conservation areas. No registered proprietor shall be in breach of this provision if any of the trees, bush or features within the conservation areas shall die from natural causes not attributed to any act or default, by or on behalf of the registered proprietor, or for which the registered proprietor is not responsible. All fencing required as a condition of consent shall be maintained in stockproof condition. Each registered proprietor may comply with such obligation by or through the Mataka Residents Association.

Comment: Area J on the Lot 4 is in conservation covenant and has been protected.

10. All areas on a lot subject to the landscaping plan prepared by DJ Scott Associates Ltd dated December 2000 or the landscaping plan prepared by Linda Clapham for Lot 19 dated 20 June 2003 shall be preserved by the registered proprietor of that lot in the same manner and to the

same extent as provided for in the relevant landscaping plan and the registered proprietor shall not, without the written approval of the Council, and then only in strict compliance with any of the conditions imposed by the Council, cut down, damage or destroy any of the landscaping or suffer or permit the cutting down, damaging or destruction of the trees, bush or other features comprising the landscaped areas. No registered proprietor shall be in breach of this provision if any of the trees, bush or features within the landscaped areas shall die from natural causes not attributed to any act or default, by or on behalf of the registered proprietor, or for which the registered proprietor is not responsible.

Comment: Landscaped areas are outside lot 4.

13.3 Easements

The application site is subject to a number of easements, including right to convey electricity in favour of Top Energy, right to convey telecommunications, conservation covenants and communal access to different areas and facilities within the station. The proposed development will not impact these easements.

13.4 Land Covenants

Land Covenants are registered on the title that relate to numerous areas and facilities within the station and house locations, including that of the Valley Lot. Compliance with the land covenants has not been considered as part of this assessment. Private land covenants are civil legal agreements between parties, they are not within the bounds of Council's jurisdiction and do not have resource consent implications. As such, it is ultimately the responsibility of the landowner to ensure that any future development of the site is undertaken in accordance with the requirements of any land covenants registered on the title.

14.0 Conclusion

The proposal involves to construct a principal dwelling and a minor dwelling with associated works at Lot 4 Matak Station.

Based on the above report it is considered that:

- Public notification is not required as adverse effects in relation to landscape, character and amenity effects, transportation, infrastructure and servicing, land disturbance and construction activities, geotechnical effects, heritage, fire risk, flood risk and ecology are considered to be less than minor;
- Limited notification is not required as written approval has been obtained from Eloise Caswell and Donald Chandler as the owner/occupier of 148 Oihi Road, Te Ti being Lot 5 Mataka Station and the proposed buildings are sufficiently separated to avoid potential adverse amenity, private or dominance effects on adjoining properties;
- The proposal accords with the relevant OPD, PDP, RPS and NZCPS ; and
- The proposal is considered to be consistent with Part 2 of the Act.

It is therefore concluded that the proposal satisfies all matters the consent authority is required to assess, and that it can be granted on a non-notified basis.



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy**




R.W. Muir
Registrar-General
of Land

Identifier **92524**
Land Registration District **North Auckland**
Date Issued 22 July 2003

Prior References

NA41D/143 NA41D/4 NA41D/5

Estate Fee Simple
Area 57.4180 hectares more or less
Legal Description Lot 4 Deposited Plan 323083

Registered Owners

Michael Frederick Gilson

Interests

5667663.5 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 22.7.2003 at 3:35 pm

Subject to a right (in gross) to transmit electricity over part marked V on DP 323083 in favour of Top Energy Limited created by Easement Instrument 5667663.8 - 22.7.2003 at 3:35 pm

The easements created by Easement Instrument 5667663.8 are subject to Section 243 (a) Resource Management Act 1991 Land Covenant in Easement Instrument 5667663.9 - 22.7.2003 at 3:35 pm

Subject to right of way and telecommunications easement over part marked V on DP 323083 created by Easement Instrument 5667663.10 - 22.7.2003 at 3:35 pm

Appurtenant hereto are right of way and telecommunications easements created by Easement Instrument 5667663.10 - 22.7.2003 at 3:35 pm

The easements created by Easement Instrument 5667663.10 are subject to Section 243 (a) Resource Management Act 1991 5725412.3 Encumbrance to Mataka Residents Association Incorporated - 10.9.2003 at 3:45 pm

6447651.4 Partial revocation of Land Covenant 5667663.9 as to CT 92542 and Lots 40 - 41 DP 346421 - 7.6.2005 at 9:00 am

Land Covenant in Deed 6447651.10 - 7.6.2005 at 9:00 am

DP 323083 (Title Plan)
ENCLOSURE - 1:100000

PROPOSED CONSERVATION COVENANTS

| Shown | Description | Area | Servient Tenement |
|-------|-----------------|-----------|-------------------|
| (A) | Pt Lot 22 Heron | 1.2100ha | Lot 24 Heron |
| (B) | Pt Lot 2 Heron | 4.8500ha | |
| (C) | Pt Lot 3 Heron | 1.1510ha | |
| (D) | Pt Lot 22 Heron | 0.5650ha | |
| (E) | Pt Lot 21 Heron | 0.1182ha | |
| (F) | Pt Lot 21 Heron | 0.6190ha | |
| (G) | Pt Lot 4 Heron | 6.1400ha | |
| (H) | Pt Lot 5 Heron | 1.4800ha | |
| (I) | Pt Lot 30 Heron | 2.8000ha | |
| (J) | Pt Lot 4 Heron | 12.2300ha | |
| (K) | Pt Lot 25 Heron | 2.7200ha | |
| (L) | Pt Lot 20 Heron | 10.4700ha | |
| (M) | Pt Lot 5 Heron | 4.2600ha | |
| (N) | Pt Lot 20 Heron | 5.5200ha | |
| (O) | Pt Lot 5 Heron | 0.7120ha | |
| (P) | Pt Lot 29 Heron | 1.4710ha | |
| (Q) | Pt Lot 24 Heron | 0.0651ha | |
| (R) | Pt Lot 21 Heron | 6.9100ha | |
| (S) | Pt Lot 29 Heron | 2.8230ha | |
| (T) | Pt Lot 7 Heron | 2.7420ha | |
| (U) | Pt Lot 20 Heron | 13.9800ha | |
| (V) | Pt Lot 6 Heron | 2.9200ha | |
| (W) | Pt Lot 8 Heron | 0.8280ha | |
| (X) | Pt Lot 8 Heron | 13.3030ha | |
| (Y) | Pt Lot 29 Heron | 3.2250ha | |
| (Z) | Pt Lot 14 Heron | 3.6150ha | |
| (AA) | Pt Lot 29 Heron | 0.8120ha | |
| (AB) | Pt Lot 22 Heron | 0.2300ha | |
| (AC) | Pt Lot 5 Heron | 4.1160ha | |
| (AD) | Pt Lot 3 Heron | 1.7800ha | |
| (AE) | Pt Lot 5 Heron | 3.3170ha | |
| (AF) | Pt Lot 5 Heron | 7.0500ha | |
| (AG) | Pt Lot 20 Heron | 3.6400ha | |
| (AH) | Pt Lot 29 Heron | 3.4670ha | |
| (AI) | Pt Lot 6 Heron | 0.26530a | |
| (AJ) | Pt Lot 7 Heron | 12.1220ha | |

MEMORANDUM OF EASEMENTS IN GROSS

| Shown | Description | Area | Servient Tenement |
|-------|-----------------|----------|-------------------|
| (A) | Pt Lot 20 Heron | 2.5300ha | |
| (B) | Pt Lot 24 Heron | 7.1400ha | |

PROPOSED CONSERVATION COVENANTS ARE ENDORSED ON SHEET 2

NOTE: ELECTRICITY EASEMENTS IN GROSS ARE ENDORSED ON SHEET 2

SHEET 1 OF 16

LAND DISTRICT North Auckland Survey Blk & Dist. IX Kerikeri & Kerikeri SD, Pt Sec 4, Sec 5, Sec 7 and Sec 8 of Te Puna OLC NO 21, Sec 1 Blk IX Bay of Islands SD, Pt Sec 12 Blk IX Kerikeri SD, OLC 20 and Barbers Grant NO 165

MEMORANDUM OF EASEMENTS

| Shown | Purpose | Dominant Tenement | Servient Tenement |
|-------|--------------|-------------------|-------------------|
| (A) | Right of Way | Lot 1 | Lot 2 |
| (B) | Right of Way | Lot 3 | Lot 4 |
| (C) | Right of Way | Lot 5 | Lot 6 |
| (D) | Right of Way | Lot 7 | Lot 8 |
| (E) | Right of Way | Lot 9 | Lot 10 |
| (F) | Right of Way | Lot 11 | Lot 12 |
| (G) | Right of Way | Lot 13 | Lot 14 |
| (H) | Right of Way | Lot 15 | Lot 16 |
| (I) | Right of Way | Lot 17 | Lot 18 |
| (J) | Right of Way | Lot 19 | Lot 20 |
| (K) | Right of Way | Lot 21 | Lot 22 |
| (L) | Right of Way | Lot 23 | Lot 24 |
| (M) | Right of Way | Lot 25 | Lot 26 |
| (N) | Right of Way | Lot 27 | Lot 28 |
| (O) | Right of Way | Lot 29 | Lot 30 |
| (P) | Right of Way | Lot 31 | Lot 32 |

APPROVALS

I hereby certify that this plan was approved by the North Auckland District Council pursuant to Section 223(4) of the Resource Management Act 1991 on the 25th day of November 2003. The following persons were members of the committee set out in the Memorandum hereon, and subject to the endorsement condition set out hereon.

[Signature] Authorised Officer

MEMORANDUM OF EASEMENTS

| Shown | Purpose | Dominant Tenement | Servient Tenement |
|-------|--------------|-------------------|-------------------|
| (A) | Right of Way | Lot 1 | Lot 2 |
| (B) | Right of Way | Lot 3 | Lot 4 |
| (C) | Right of Way | Lot 5 | Lot 6 |
| (D) | Right of Way | Lot 7 | Lot 8 |
| (E) | Right of Way | Lot 9 | Lot 10 |
| (F) | Right of Way | Lot 11 | Lot 12 |
| (G) | Right of Way | Lot 13 | Lot 14 |
| (H) | Right of Way | Lot 15 | Lot 16 |
| (I) | Right of Way | Lot 17 | Lot 18 |
| (J) | Right of Way | Lot 19 | Lot 20 |
| (K) | Right of Way | Lot 21 | Lot 22 |
| (L) | Right of Way | Lot 23 | Lot 24 |
| (M) | Right of Way | Lot 25 | Lot 26 |
| (N) | Right of Way | Lot 27 | Lot 28 |
| (O) | Right of Way | Lot 29 | Lot 30 |
| (P) | Right of Way | Lot 31 | Lot 32 |

Class of Survey: Class III

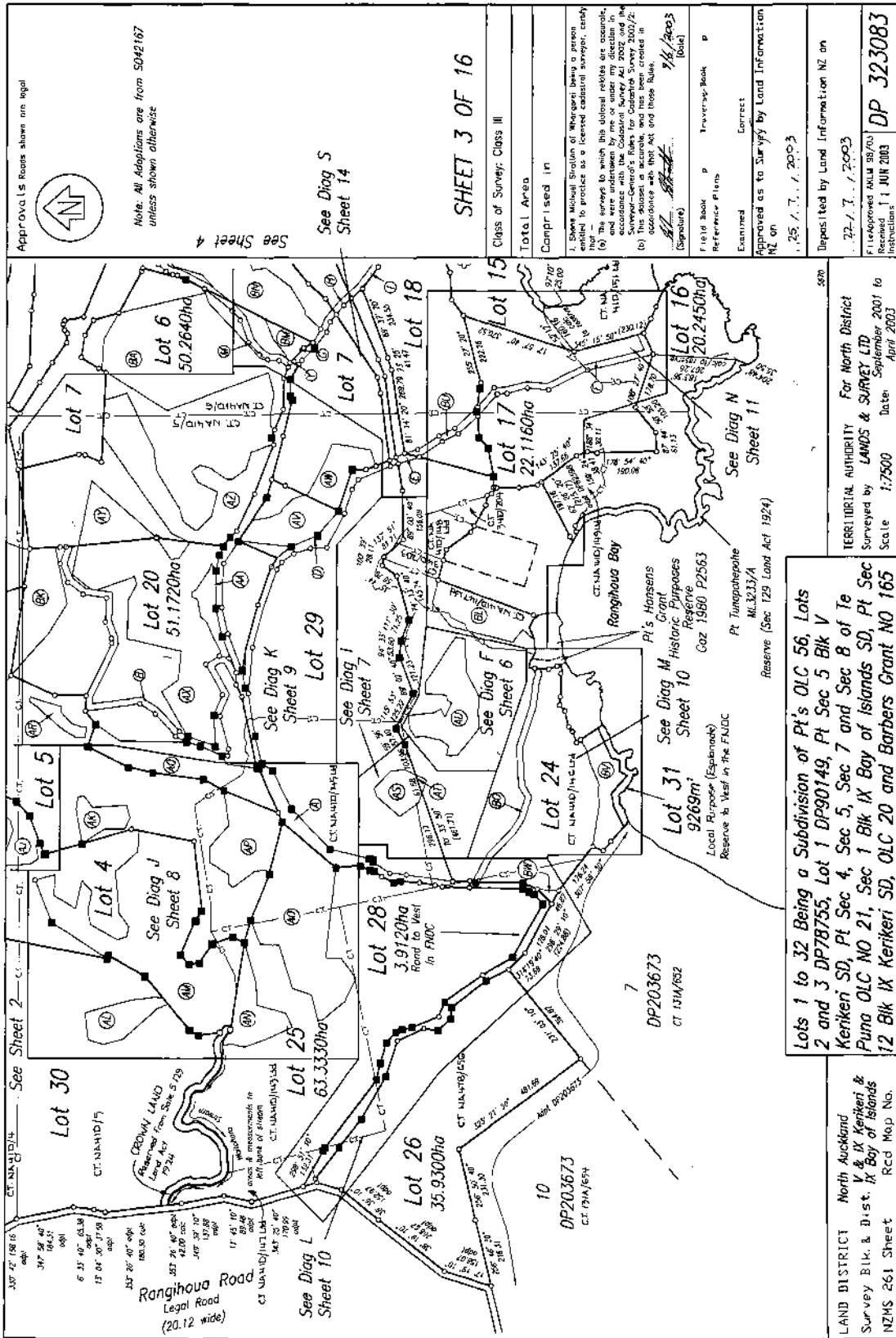
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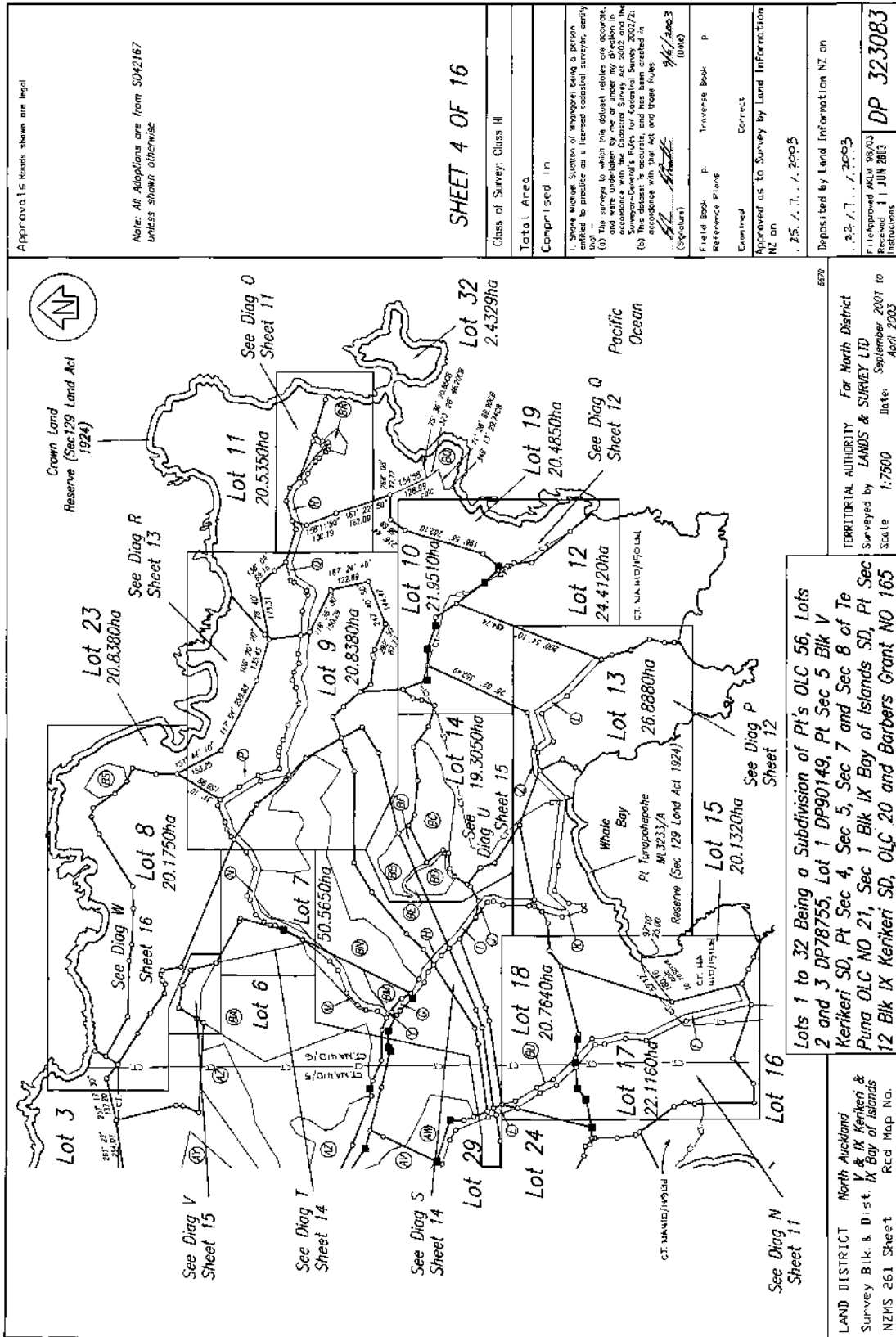
Classified in: AM10/2, AM10/3, AM10/4, AM10/5, AM10/6, AM10/7, AM10/8, AM10/9, AM10/10, AM10/11, AM10/12, AM10/13, AM10/14, AM10/15, AM10/16, AM10/17, AM10/18, AM10/19, AM10/20, AM10/21, AM10/22, AM10/23, AM10/24, AM10/25, AM10/26, AM10/27, AM10/28, AM10/29, AM10/30, AM10/31, AM10/32, AM10/33, AM10/34, AM10/35, AM10/36, AM10/37, AM10/38, AM10/39, AM10/40, AM10/41, AM10/42, AM10/43, AM10/44, AM10/45, AM10/46, AM10/47, AM10/48, AM10/49, AM10/50, AM10/51, AM10/52, AM10/53, AM10/54, AM10/55, AM10/56, AM10/57, AM10/58, AM10/59, AM10/60, AM10/61, AM10/62, AM10/63, AM10/64, AM10/65, AM10/66, AM10/67, AM10/68, AM10/69, AM10/70, AM10/71, AM10/72, AM10/73, AM10/74, AM10/75, AM10/76, AM10/77, AM10/78, AM10/79, AM10/80, AM10/81, AM10/82, AM10/83, AM10/84, AM10/85, AM10/86, AM10/87, AM10/88, AM10/89, AM10/90, AM10/91, AM10/92, AM10/93, AM10/94, AM10/95, AM10/96, AM10/97, AM10/98, AM10/99, AM10/100.

APPROVED AS TO SURVEY BY LAND INFORMATION NZ ON 25.11.2003

DEPOSITED BY LAND INFORMATION NZ ON 27.11.2003

DP323083





Approvals shown are legal

Note: All Abolitions are from S042167 unless shown otherwise

SHEET 4 OF 16

Class of Survey: Class III

Total Area

Comprised in

1. Show known Station of adjacent being a prism set to produce as a fixed coastal survey, verify that -

(a) The surveys to which this document relates are accurate, and were undertaken by me or under my direction in accordance with the Survey Act 1976 and the Survey-General's Rules for Coastal Surveys, 2002/2.

(b) This document is accurate, and has been created in accordance with that Act and those Rules

(Signature) *[Signature]* 9/6/2003 (Date)

Field Book: p. Inverse Book: p.

Reference Plane: Correct

Examined

Approved as to Survey by Land Information NZ on: 25.7.7.2003

Deposited by Land Information NZ on: 25.7.7.2003

Filed/Approved under 88(3) of the Land Information Act 2001 on 11 JUN 2003

Instructions: DP 323083

Lots 1 to 32 Being a Subdivision of Pt's OLC 56, Lots 2 and 3 DP78755, Lot 1 DP90149, Pt Sec 5 Blk V Kenikeri SD, Pt Sec 4, Sec 5, Sec 7 and Sec 8 of Te Puna OLC NO 21, Sec 1 Blk IX Bay of Islands SD, Pt Sec 12 Blk IX Kenikeri SD, OLC 20 and Barbers Grant NO 165

LAND DISTRICT North Auckland

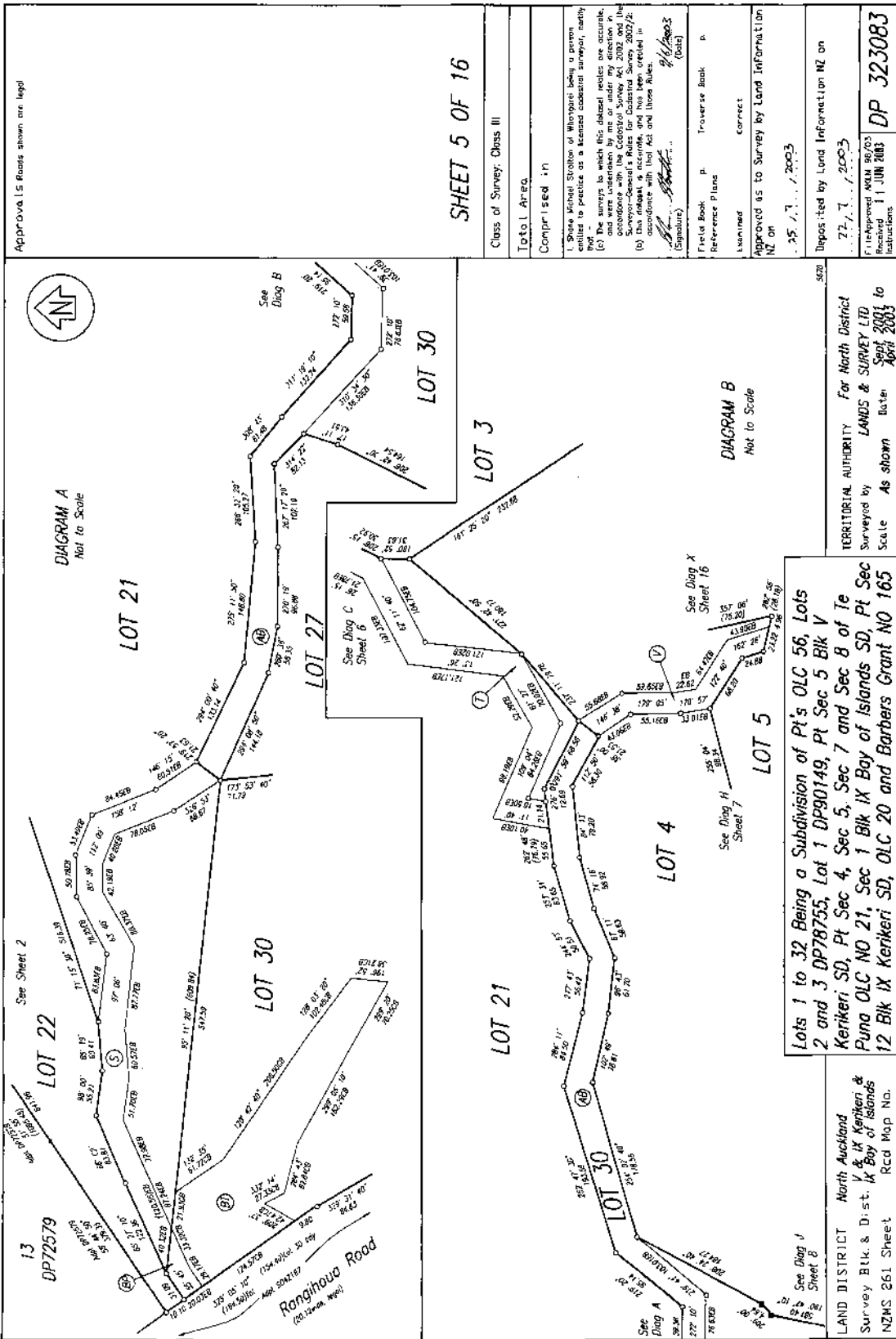
Survey Blk. & Dist. IX Kenikeri & Bay of Islands

NZMS 261 Sheet Rcd Map No.

TERRITORIAL AUTHORITY Far North District

Surveyed by JAMES & SURVEY LTD

Scale 1:7500 Date: September 2001 to April 2003



Approvals Route shown are legal

SHEET 5 OF 16

Class of Survey: Class III

Total Area:

Comprised in:

Stone Michael Station of Whangarei, to permit
 entitled to practice as a licensed cadastral surveyor, partly
 Prof -
 (c) The surveys to which this detailed report are accurate,
 accordance with the Cadastral Survey Act 2002 and the
 Surveyor-General's Rules for Cadastral Survey, 2002/2;
 (b) this report is accurate, and has been created in
 accordance with the Act and those Rules;

(Signature) *[Signature]* 14/06/03
 (Date)

Field Book *P* Traverse Book *P*
 Reference Plans *Correct*
 Examined *Correct*

Approved as to Survey by Land Information
 NZ on *35.1.2003*

Deposited by Land Information NZ on
27.1.2003

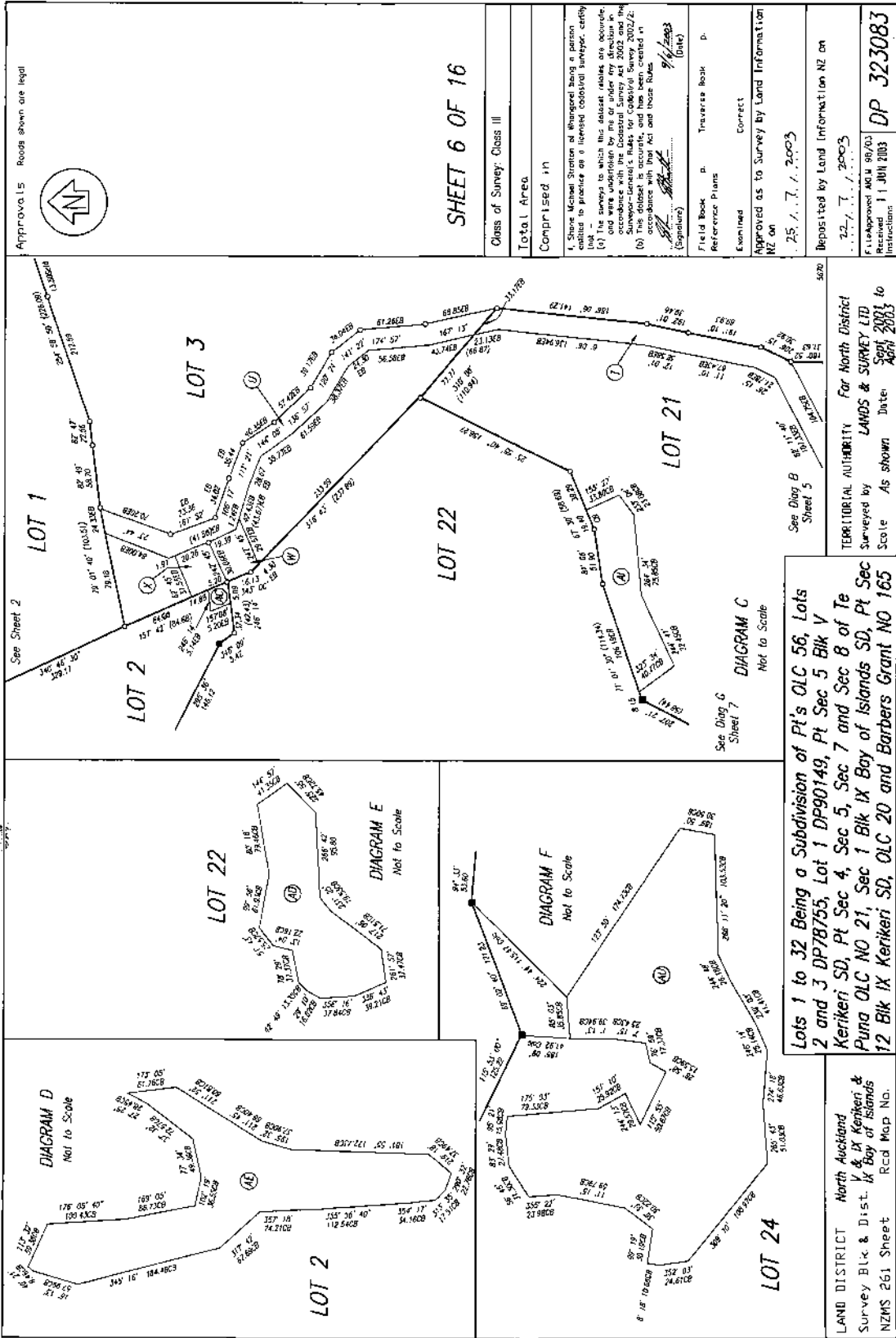
File/Approved *MLM 88/03*
 Received *1 JUN 2003* DP *323083*
 Instructions

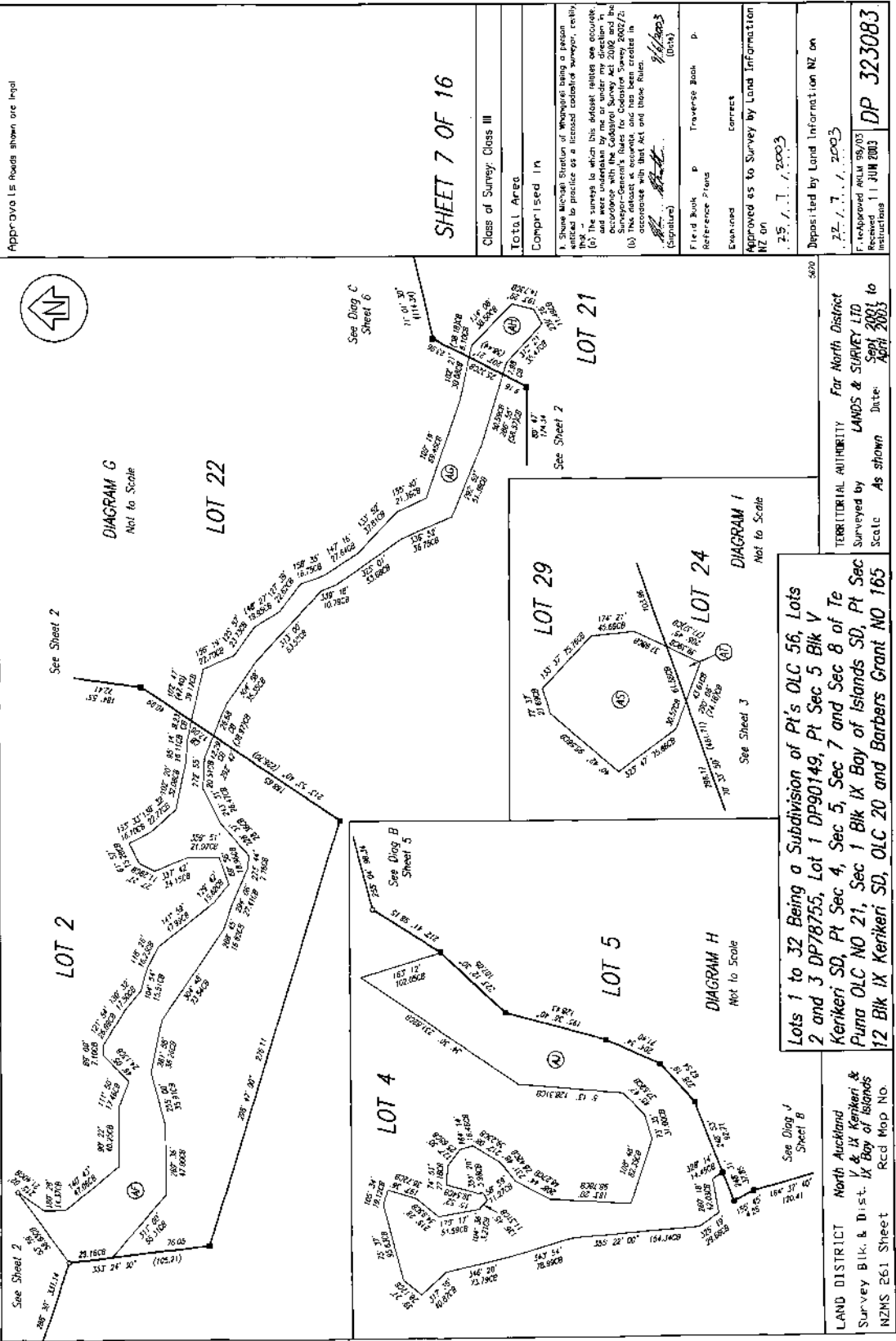
TERITORIAL AUTHORITY For North District
 Surveyed by *LANDS & SURVEY LTD*
 Scale As shown Date *Sept 2001* to *April 2003*

Lots 1 to 32 Being a Subdivision of Pt's OLC 56, Lots
 2 and 3 DP78755, Lot 1 DP90149, Pt Sec 5 Blk V
 Kerikeri SD, Pt Sec 4, Sec 5, Sec 7 and Sec 8 of Te
 Puna OLC NO 21, Sec 1 Blk IX Bay of Islands SD, Pt Sec
 12 Blk IX Kerikeri SD, OLC 20 and Barbers Grant NO 165

LAND DISTRICT North Auckland
 Survey Blk. & Dist. IX Kerikeri &
 NZMS 261 Sheet Rcd Map No.

See Diag J
 Sheet 8





Approvals & Roads shown are legal

SHEET 7 OF 16

| | |
|---|-----------------|
| Class of Survey: Class III | |
| Total Area | |
| Comprised in | |
| 1. Show Medical Station of Wharfedale being a person entitled to practice as a licensed cadastral surveyor, re-verify the survey to which this address relates see diagram (b) and was undertaken by me or under my direction in accordance with the Cadastral Survey Act 2002 and the Survey-General's Rules for Cadastral Survey, 2002/2. (b) The survey was undertaken in accordance with the provisions of the Act and these Rules. | |
| (Signature) | 9/1/2003 (Date) |
| Field Book | Traverse Book |
| Reference Plans | Correct |
| Examined | |
| Approved as to Survey by Land Information NZ on | |
| 25.1.2003 | |
| Deposited by Land Information NZ on | |
| 27.1.2003 | |
| F. Approved NZLM 98/03 | |
| Received 11 JUN 2003 | |
| Instructions DP 323083 | |

TERITORIAL AUTHORITY: Far North District

Surveyed by: LANDS & SURVEY LTD

Scale: As shown

Date: Sept 2001 to April 2003

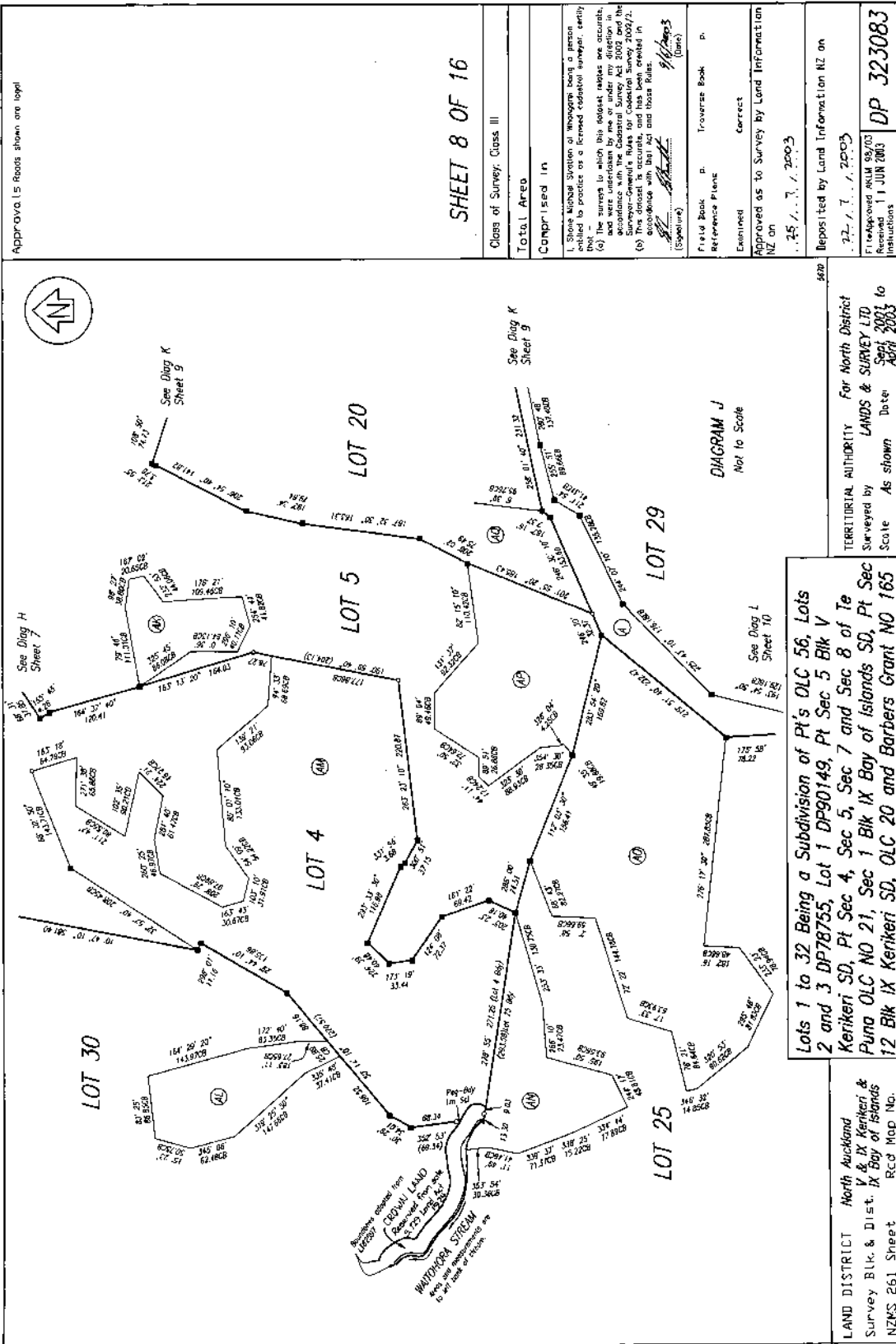
Lots 1 to 32 Being a Subdivision of Pt's OLC 56, Lots 2 and 3 DP78755, Lot 1 DP90149, Pt Sec 5 Blk V Kerikeri SD, Pt Sec 4, Sec 5, Sec 7 and Sec 8 of Te Puna OLC NO 21, Sec 1 Blk IX Bay of Islands SD, Pt Sec 12 Blk IX Kerikeri SD, OLC 20 and Barbers Grant NO 165

LAND DISTRICT: North Auckland

Survey Blk. & Dist. IX Kerikeri & IX Bay of Islands

NZMS 261 Sheet

Rcd Map NO.



Approvals Roads shown are 100pl

SHEET 8 OF 16

| | |
|---|-------------------------|
| Class of Survey: Class III | |
| Total Area | |
| Comprised in | |
| <p>1. STAKES WITH SWAY STATION (if necessary) being a person entitled to practice as a licensed cadastral surveyor, certify that -</p> <p>(a) The surveys to which this deposit relates are accurate, and</p> <p>(b) The deposit is accurate, and has been created in accordance with the Cadastral Survey Act 2002 and the Survey-General's Rules for Cadastral Survey 2002/2.</p> <p>(c) The deposit is accurate, and has been created in accordance with the Survey-General's Rules for Cadastral Survey 2002/2.</p> | |
| (Signature) | 25/07/2003 (Date) |
| Field Book p. Traverse Book p. | Reference Point Correct |
| Examined | |
| Approved as to Survey by Land Information NZ on | |
| 25/07/2003 | |
| Deposited by Land Information NZ on | |
| 22/07/2003 | |
| Flashed on ALM 98/03 | |
| Received 11 JUN 2003 | |
| Instructions | |
| DP 323083 | |

Scale As shown Date 2003 to 2003

TERRITORIAL AUTHORITY For North District

Surveyed by LANDS & SURVEY LTD

Scale As shown Date 2003 to 2003

TERRITORIAL AUTHORITY For North District

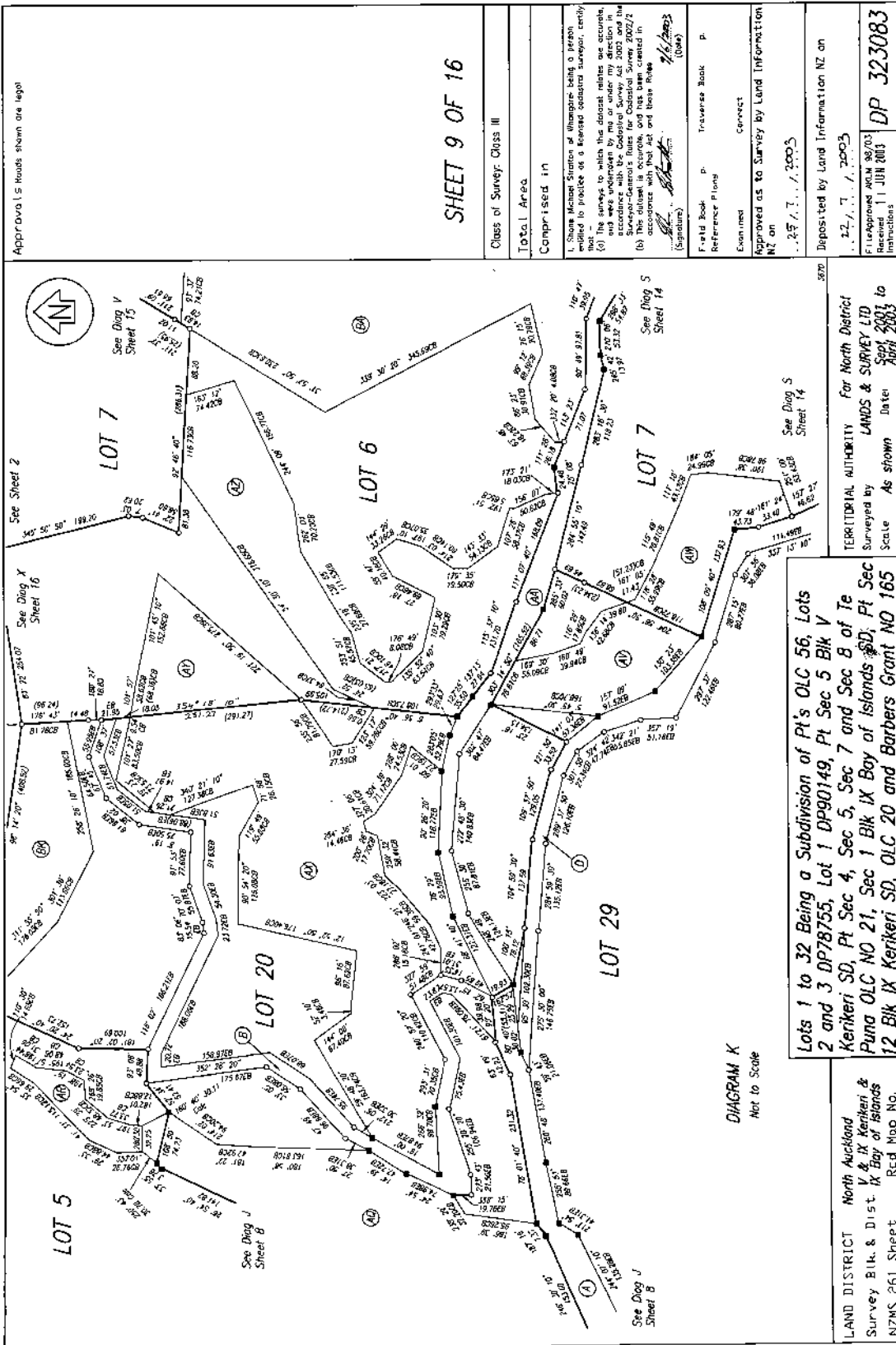
Surveyed by LANDS & SURVEY LTD

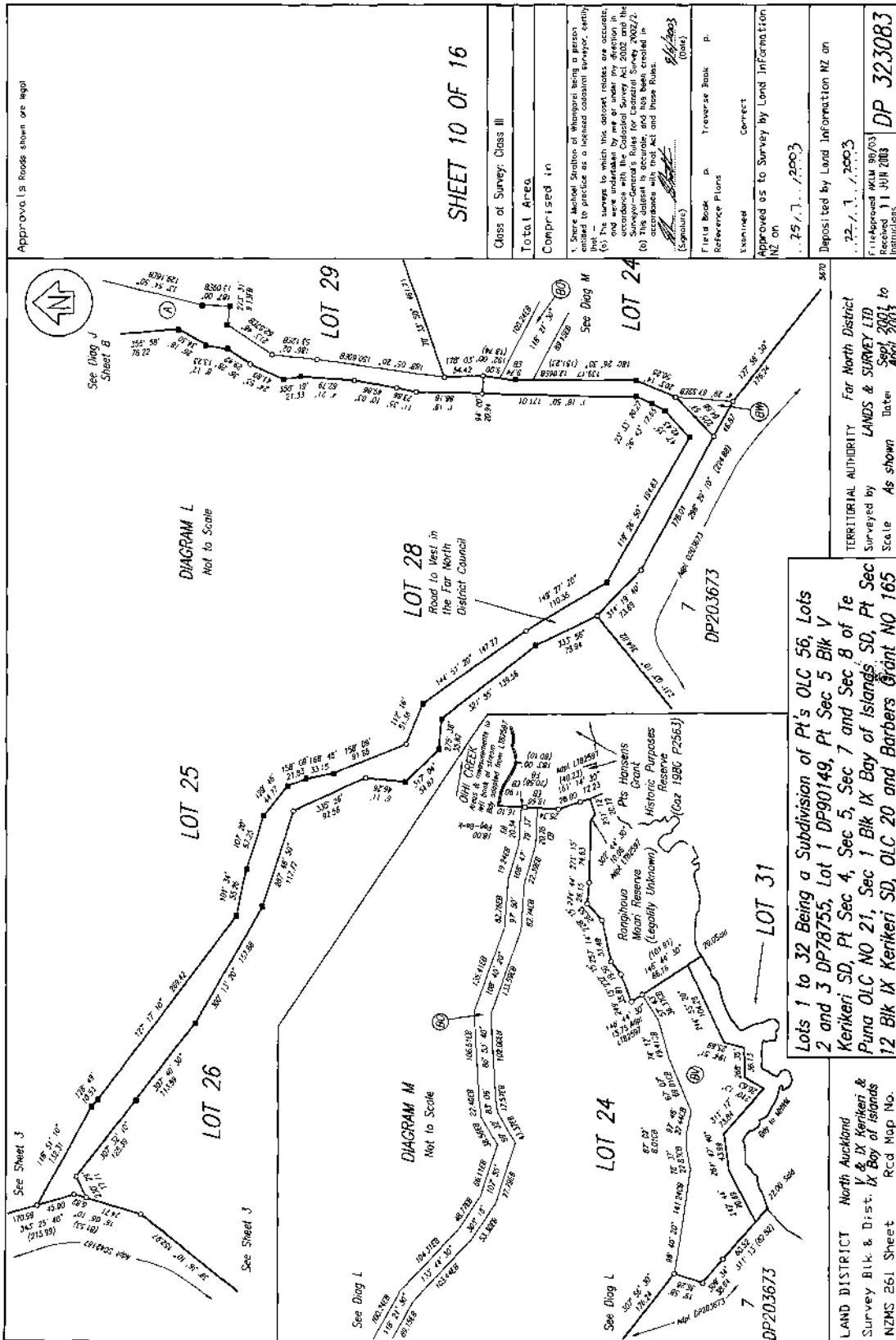
Scale As shown Date 2003 to 2003

LAND DISTRICT North Auckland

Survey Blk. & Dist. IX Kerikeri & Puna OLC NO 21, Sec 1 Blk IX Bay of Islands

NZMS 261 Sheet RCD Map No.





Approvals Roads shown are legal

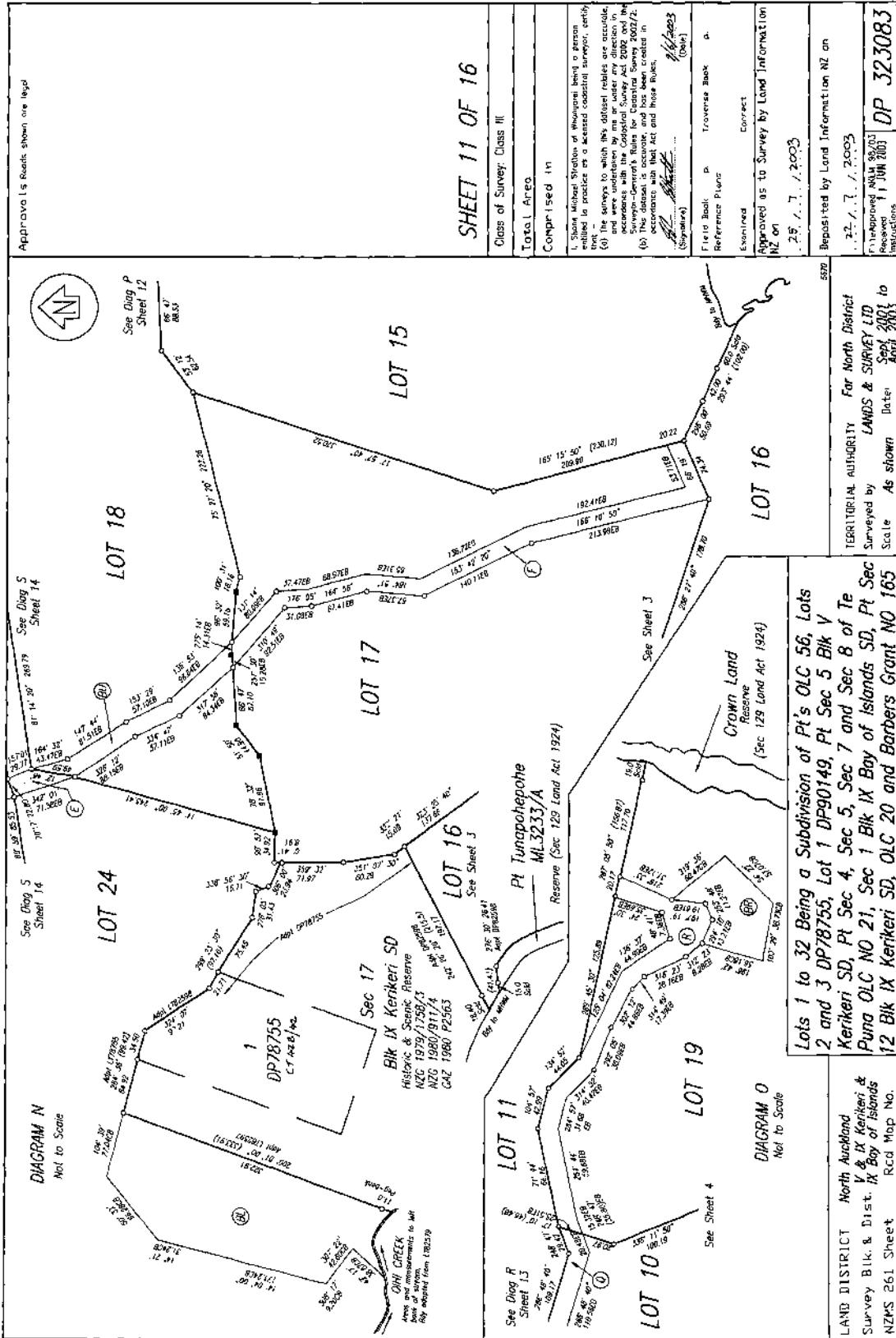
SHEET 10 OF 16

| |
|--|
| Class of Survey: Class III |
| Total Area Comprised in |
| 1. State Māori Stratification of Whangarei being a person entitled to practice as a licensed cadastral surveyor, entity but the surveys to which his deposit notices are accurate, (5) and were undertaken by me or under my direction in accordance with the Cadastral Survey Act 2002 and the Survey-General's Rules for Cadastral Survey, 2002/2. (6) accordance with that Act and these Rules. |
| (Signature) <i>[Signature]</i> (Date) 22/11/2003 |
| Field Book p. 1 reverse Blank p. |
| Reference Plans Connect |
| Examined |
| Approved as to Survey by Land Information NZ on 25/11/2003 |
| Deposited by Land Information NZ on 22/11/2003 |
| File Approval No. 90/03 |
| Received 11 JUN 2003 |
| Instructions DP 323083 |

Lots 1 to 32 Being a Subdivision of Pt's OLC 56, Lots 2 and 3 DP78755, Lot 1 DP90149, Pt Sec 5 Blk V Kerikeri SD, Pt Sec 4, Sec 5, Sec 7 and Sec 8 of Te Puna OLC NO 21, Sec 1 Blk IX Bay of Islands SD, Pt Sec 12 Blk IX Kerikeri SD, OLC 20 and Barbers Grant NO 165

LAND DISTRICT North Auckland Survey Blk & Dist. IX Kerikeri & Bay of Islands NZMS 261 Sheet Rcd Map No.

TERRITORIAL AUTHORITY Far North District LANDS & SURVEY LTD Surveyed by Scale As shown Date 2003 to 2001



Approved as to Survey by Land Information NZ on 25.7.2003

Class of Survey: Class III
Total Area Comprised in

1. Shows Mutual Station of Measurement being a person entitled to practice as a licensed cadastral surveyor, entity (c) The surveys to which this default relates are accurate, and in accordance with the Cadastral Survey Act 2002 and the Survey-General's Rules for Cadastral Survey 2007/2. (b) This diagram is accurate and has been created in accordance with the Act and those Rules.

(Signatures) (Date)
Field Book Reference Plans Examined
Traverse Book Connect

Approved as to Survey by Land Information NZ on 25.7.2003
Deposited by Land Information NZ on 25.7.2003

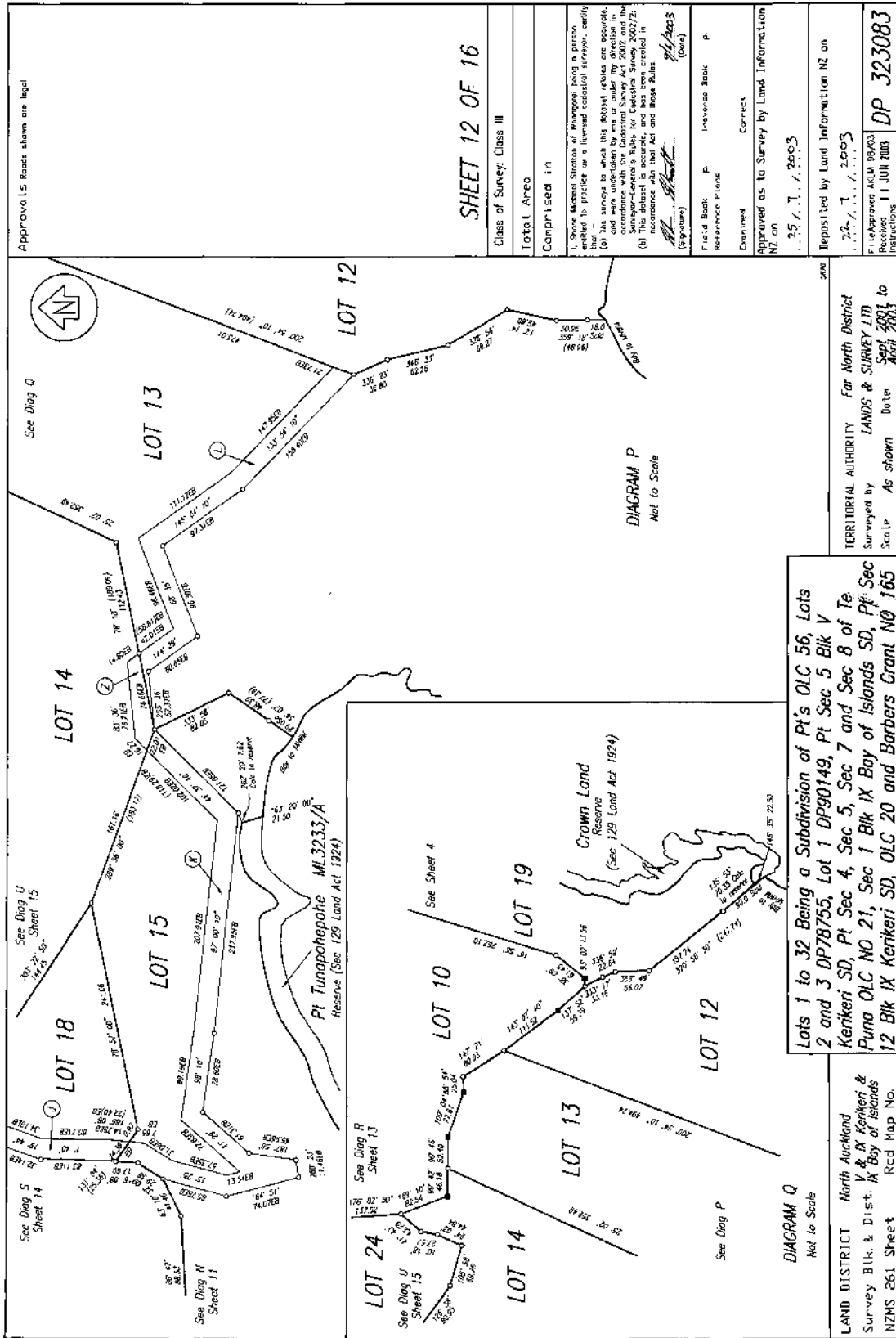
Revised 1 June 2003
DP 323083

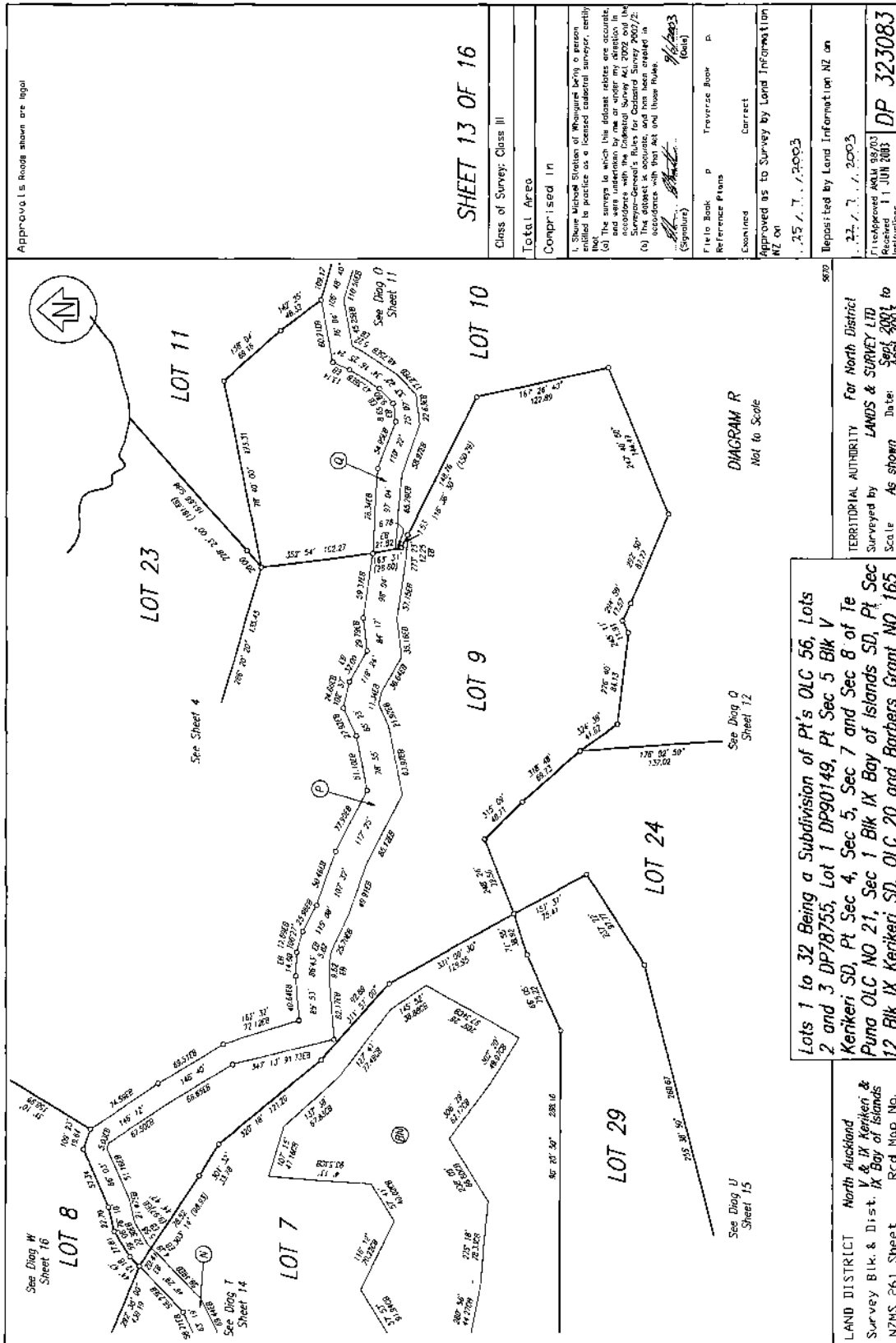
Scale As shown
Date: April 2003

TERRITORIAL AUTHORITY Far North District
Surveyed by LANDS & SURVEY LTD
Scale As shown Date: April 2003

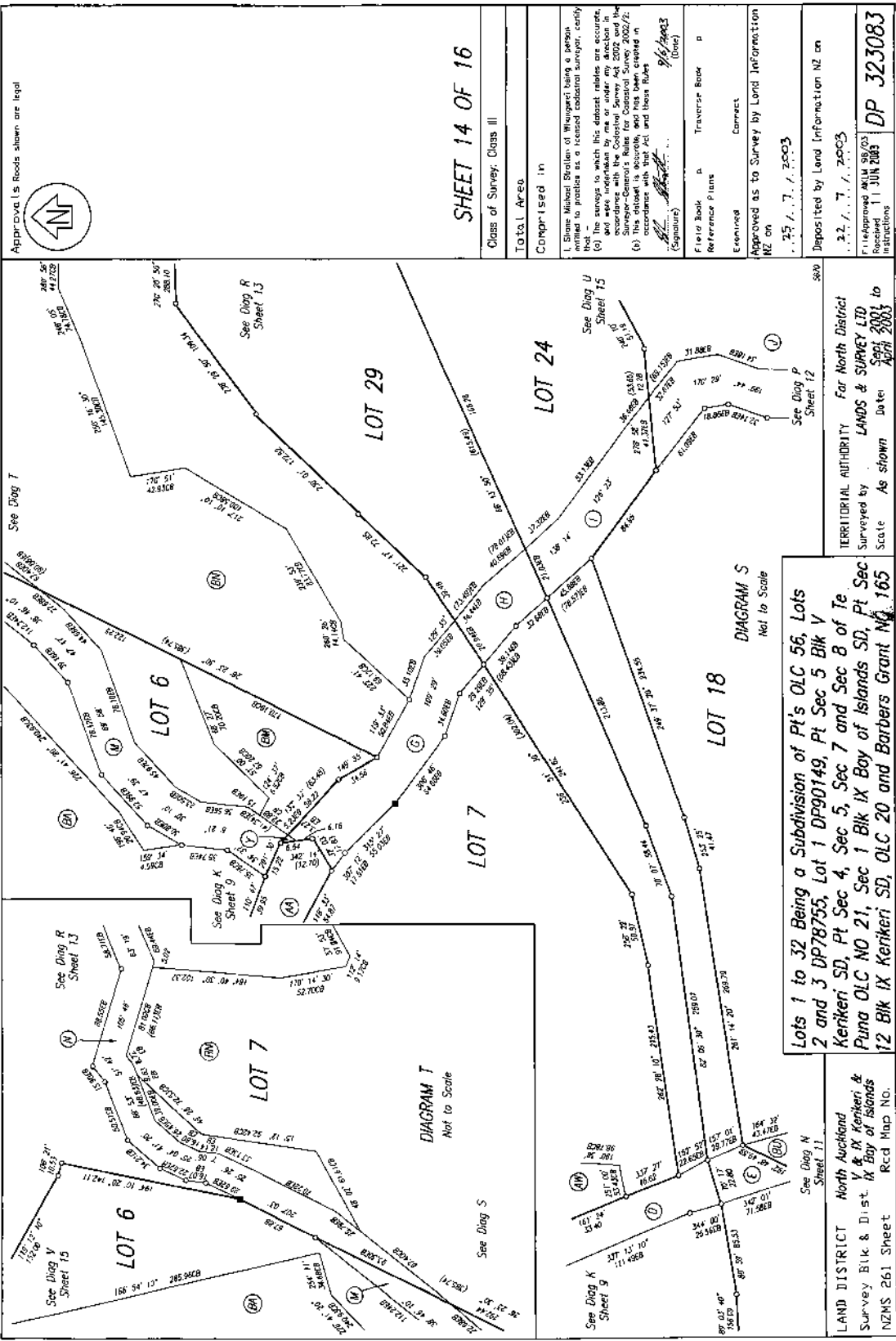
Lots 1 to 32 Being a Subdivision of Pt's OLC 56, Lots 2 and 3 DP78755, Lot 1 DP90149, Pt Sec 5 Blk V Kerikeri SD, Pt Sec 4, Sec 5, Sec 7 and Sec 8 of Te Puna OLC NO 21, Sec 1 Blk IX Bay of Islands SD, Pt Sec 12 Blk IX Kerikeri SD, OLC 20 and Barbers Grant NO 165

DIAGRAM O
Not to Scale
LAND DISTRICT North Auckland
Survey Blk. & Dist. IX Bay of Islands
NZMS 261 Sheet Rcd Map No.





Lots 1 to 32 Being a Subdivision of Pt's OLC 56, Lots 2 and 3 DP78755, Lot 1 DP90149, Pt Sec 5 Blk V Kerikeri SD, Pt Sec 4, Sec 5, Sec 7 and Sec 8 of Te Puna OLC NO 21, Sec 1 Blk IX Bay of Islands SD, Pt Sec 12 Blk IX Kerikeri SD, OLC 20 and Barbers Grant NO. 165



Approvals Roads shown are legal



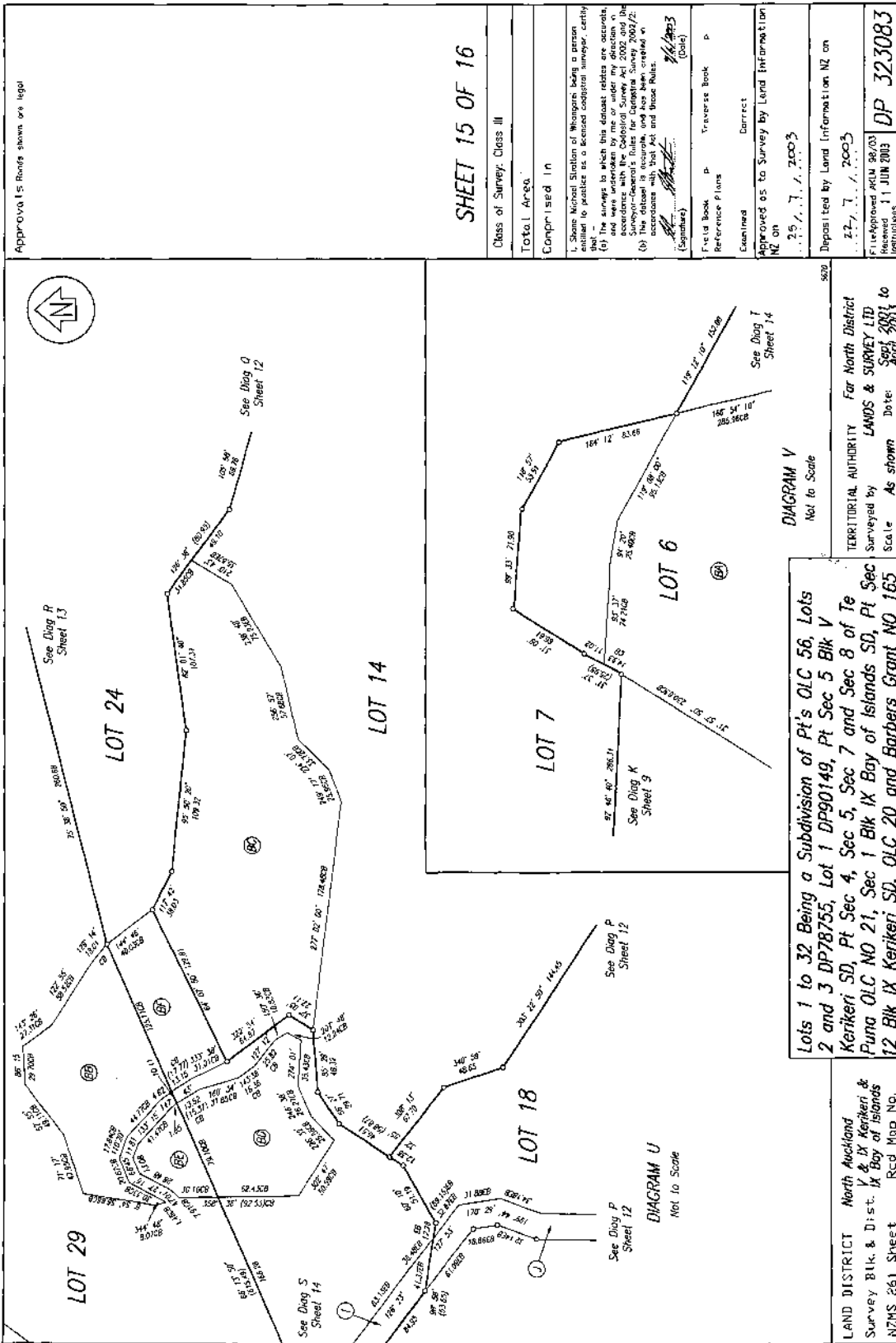
SHEET 14 OF 16

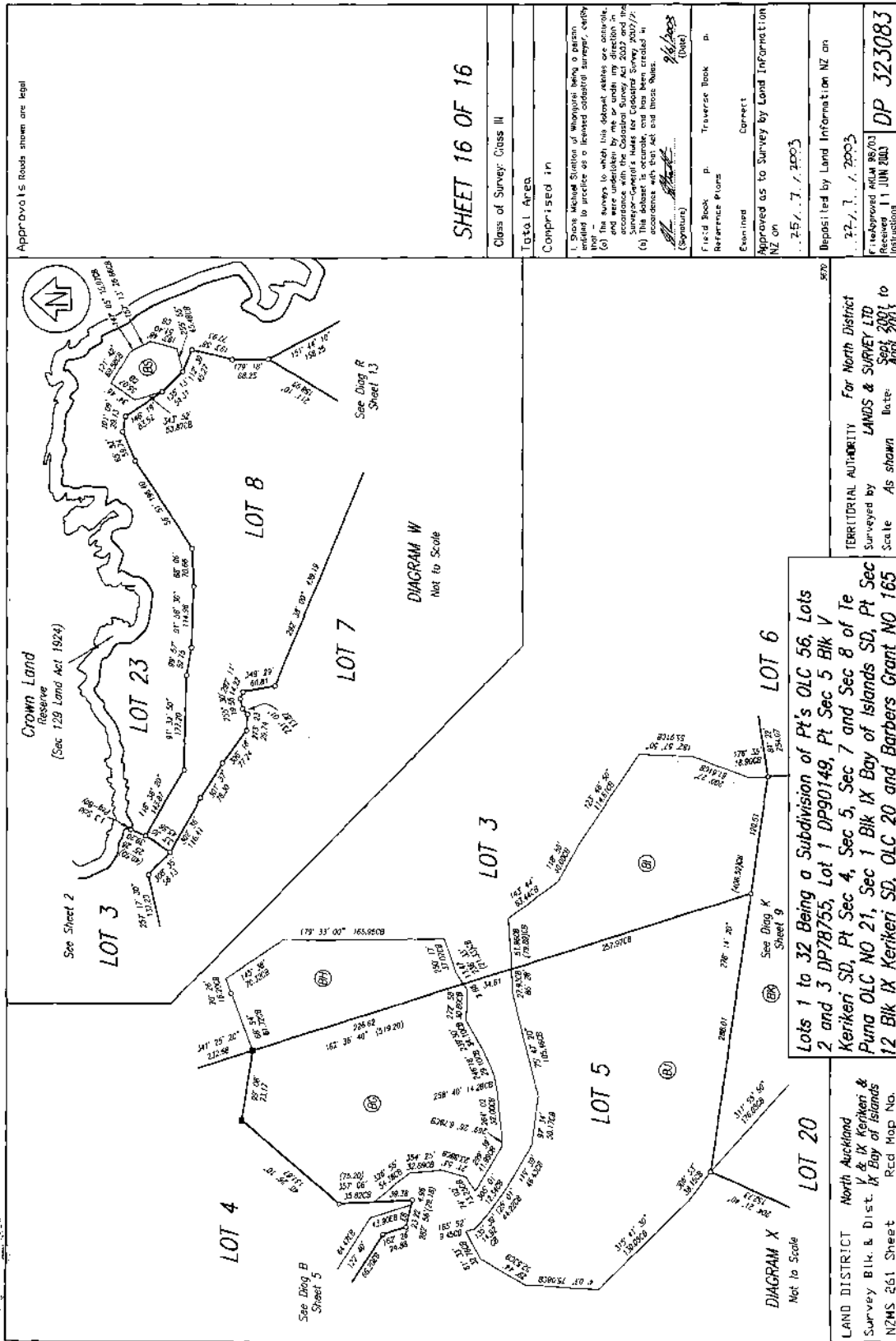
| |
|---|
| Class of Survey: Class III |
| Total Area: |
| Comprised in: |
| 1. Shown Mutual Station of Whangarei being a person that - to produce a correct cadastral survey, verify that - the surveys to which this dataset relates are accurate, and were measured by me, or under my direction in accordance with the Survey-Control Rules for Cadastral Survey, 2002/2; (b) This dataset is accurate, and has been created in accordance with that Act and those Rules |
| (Signature) <i>[Signature]</i> 9/6/2003 (Date) |
| Field Book: A Traverser Book B |
| Reference Plans: Correct |
| Examined: Correct |
| Approved as to Survey by Land Information NZ on: 25.7.7.2003 |
| Deposited by Land Information NZ on: 22.7.7.2003 |
| File Approved NZLS 08/03 |
| Survey Instructions: DP 323083 |

Lots 1 to 32 Being a Subdivision of Pt's OLC 56, Lots 2 and 3 DP78755, Lot 1 DP90149, Pt Sec 5 Blk V Kerikeri SD, Pt Sec 4, Sec 5, Sec 7 and Sec 8 of Te Puna OLC NO 21, Sec 1 Blk IX Bay of Islands SD, Pt Sec 12 Blk IX Kerikeri SD, OLC 20 and Barbers Grant No. 165

LAND DISTRICT North Auckland Survey Blk & Dist. IX Kerikeri & Bay of Islands Rcd Map No. NZMS 261 Sheet

TERRITORIAL AUTHORITY Far North District LANDS & SURVEY LTD Surveyed by Scale As shown Date Sept 2001 to April 2003







FAR NORTH DISTRICT COUNCIL

CONO 5667663.5 Consen

Cpy - 01/01, Pgs - 003, 03/09/03, 13:43



DocID: 310973708

CONSENT NOTICE PURSUANT TO SECTION 221 OF THE RESOURCE MANAGEMENT ACT 1991

In the matter of a Consent Notice issued pursuant to Section 221 of the Resource Management Act 1991 ("Act") in respect of Subdivision Consents RC 2010428, RC 2020211, RC 2030467 and RC 2030988 for the subdivision ("subdivision") on the survey plan DP 323083 showing Lots 1-27 and 29-32 being a subdivision of Pt's OLC 56, Lots 2 and 3 DP 78755, Lot 1 DP90149, Pt Sec 5 Blk V Kerikeri SD, Pt Sec 4, Sec 5, Sec 7 and Sec 8 of Te Puna OLC No 21, Sec 1 Blk IX Bay of Islands SD, Pt Sec 12 Blk IX Kerikeri SD, OLC 20 and Barbers Grant No 165.

I, P J Killalea, the Resource Consents Manager of the Far North District Council, hereby certify that pursuant to conditions of the Council's consent of 12 February 2001, as varied on 20 November 2001, 23 December 2002 and 30 May 2003, the following shall apply:

In relation to all Lots

1. Prior to any earthworks commencing on site the registered proprietor of a lot or part thereof ("**registered proprietor**") shall advise Iwi that such earthworks are commencing and invite Iwi to be present during such work. If during earthworks, any Koiwi or other archaeological remains are uncovered, works shall cease and the Iwi and the New Zealand Historic Places Trust shall be advised immediately.
2. The registered proprietor shall procure that Mataka Limited shall carry out archaeological survey and assessment work by an appropriately qualified archaeologist in order to:
 - (a) Identify and record Pa sites and associated features on Mataka Station;
 - (b) Relocate previously recorded archaeological sites and record the current state and location of such sites where possible;
 - (c) Accurately transpose the location of surveyed sites to updated plans, including where possible GPS positions;

The archaeological survey and assessment is to be completed within 1 year of the issue of a certificate under Section 224 of the Act and upon completion of the archaeological survey and assessment copies of such survey and assessment are to be forwarded to the Historic Places Trust and the Far North District Council. Each registered proprietor may fulfil the obligation contained in this condition by entering into a contract with Mataka Limited to comply with this condition.

3. The registered proprietor shall ensure that the rules of the Mataka Residents Association Incorporated shall include covenants providing for registered proprietors of lots to be notified of the archaeological records affecting the lot purchased by each such registered proprietor, prohibiting the destruction of any archaeological site in contravention of the Historic Places Act 1993, and requiring the registered proprietor to undertake prior archaeological assessment when undertaking any earthworks near a recorded site. The registered proprietor shall ensure that such rules shall also prohibit the keeping of cats and mustelids. The keeping of dogs shall be limited to a maximum of 2 per lot which must be confined (by way of an escape proof enclosure) to the registered proprietor's exclusive use area, except when in the company of that registered proprietor (or other invitee) and then on a leash at all times.
4. The registered proprietor of each lot on deposited plan 323083 may erect one (1) dwelling house together with accessory buildings, including water storage facilities, except as may be provided by a subsequent resource consent or where the provisions of the District Plan applicable to the lot allow any additional building as a permitted activity. The dwelling houses and accessory buildings shall be located as shown on the Lands and Survey plan reference 5670/12 dated 24 February 2003 and shall be consistent with the relevant design criteria in the applicable District Plan.
5. No building development may be located less than 10 metres from any archaeological sites, details of which are contained in the Architage Reports prepared by Diane Harlow dated November 2000 and May 2002.
6. All electricity, telecommunication and other utility services shall be underground, save that the electricity supplied to each lot may be supplied from an overhead supply existing as at the date of this consent notice.
7. Any earthworks including those required to construct accessways to building sites shall be so designed to cause minimal impacts on the landscape and any exposed cuts shall be regressed or planted in native vegetation.
8. An effective Possum Control and Goat Eradication Program shall be established in consultation with and to the satisfaction of the Environmental Services Manager of the Far North District Council and thereafter shall be maintained by or on behalf of the registered proprietors of each of the lots on deposited plan 323083 at Mataka Station to minimise damage to existing and regenerating indigenous vegetation. In December of each year, the registered proprietor of each of the lots on deposited plan 323083 at Mataka Station or the Mataka Residents Association Incorporated shall provide a report to the Environmental Services Manager on the Possum and Goat Eradication Programme that has been done on such registered proprietor's lot by reference to that approved Eradication Programme. It is acknowledged that registered proprietors may discharge such obligations through the Possum Control and Goat Eradication Programme approved by the Environmental Services Manager and undertaken by the Mataka Residents Association.
9. All conservation areas as shown on a lot on deposited plan 323083 shall be preserved by the registered proprietor of that lot, and the registered proprietor shall not, without the written approval of the Council, and then only in strict compliance with any of the conditions imposed by the Council, cut down, damage or destroy any of such conservation areas or suffer or permit the cutting down, damaging or destruction of the trees, bush or other areas comprising the conservation areas. No registered proprietor shall be in breach of this provision if any of the trees, bush or features within the conservation areas shall die from natural causes not attributed to any act or default, by or on behalf of the registered proprietor, or for which the registered proprietor is not responsible. All fencing required as a condition of consent shall be maintained in stockproof condition. Each registered proprietor may comply with such obligation by or through the Mataka Residents Association

10. All areas on a lot subject to the landscaping plan prepared by DJ Scott Associates Ltd dated December 2000 or the landscaping plan prepared by Linda Clapham for Lot 19 dated 20 June 2003 shall be preserved by the registered proprietor of that lot in the same manner and to the same extent as provided for in the relevant landscaping plan and the registered proprietor shall not, without the written approval of the Council, and then only in strict compliance with any of the conditions imposed by the Council, cut down, damage or destroy any of the landscaping or suffer or permit the cutting down, damaging or destruction of the trees, bush or other features comprising the landscaped areas. No registered proprietor shall be in breach of this provision if any of the trees, bush or features within the landscaped areas shall die from natural causes not attributed to any act or default, by or on behalf of the registered proprietor, or for which the registered proprietor is not responsible.

In relation to Lots 8, 9, 10, 12, 13, 15 and 18

11. Earthworks for Lots 8, 9, 10, 12, 13, 15 and 18 as shown on deposited plan 323083 are to be monitored by a suitably qualified archaeologist for the purposes of identifying any unrecorded subsurface archaeological remains.

In relation to Lots 19 and 23

12. Development on Lots 19 and 23 shall be limited to one building only of not more than 500m² per lot and shall be within the building areas identified on deposited plan 323083 as "BR" in respect of Lot 19 and "BS" in respect of Lot 23. The buildings on Lots 19 and 23 shall be located below the ridgeline behind the building site and shall not exceed a height of 5 metres above natural ground level or finished ground height whichever results in the height of the building being lower when measured above sea level. Any parking areas shall be located landward of the building. The exterior appearance of any buildings shall be designed to be visually unobtrusive by the use of appropriate design, materials and exterior colours. The access to the building areas including landscaping shall be completed generally in accordance with the plans and details provided to Council and approved by Council's Resource Consents Manager.

This Consent Notice is to be registered on the new Certificates of Title to be issued for Lots 1-27 and 29-32 DP 323083.

Dated this *18th* day of *July* 2003

Signed by P J Killalea of the Far North District
Council on behalf of, and by the authority of the
said Council

P.J. Killalea

| DRAWING LIST | | |
|--------------|-------------------------|-----|
| SHEET | SHEET TITLE | REV |
| RC000 | SITE PLAN 1:1000 | A |
| RC001 | SITE PLAN - CONTEXT | A |
| RC002 | SITE PLAN - LANDSCAPING | A |
| RC003 | SITE PLAN - DWELLINGS | A |
| RC004 | GA FLOOR PLAN | A |
| RC005 | ROOF PLAN 1:50 | A |
| RC006 | ELEVATION - NORTH | A |
| RC007 | ELEVATION - WEST | A |
| RC008 | ELEVATION - EAST | A |
| RC009 | ELEVATION - SOUTH | A |
| RC010 | SITE - CROSS SECTIONS | A |
| RC011 | SITE - LONG SECTIONS | A |
| RC012 | SITE - SECTIONS | A |
| RC013 | CABIN FLOOR PLAN | A |
| RC014 | CABIN ROOF PLAN | A |
| RC015 | ELEVATION - MINOR NORTH | A |
| RC016 | ELEVATION - MINOR SOUTH | A |
| RC017 | ELEVATION - MINOR EAST | A |
| RC018 | ELEVATION - MINOR WEST | A |



MATAKA STATION

202336



Cheshire Architects Limited Level 1 Hobson Towers West 26-28 Hobson Street Auckland New Zealand PO Box AMSC 90952

PH +64 9 358 2770 FX +64 9 358 2771 EM www.cheshirearchitects.com WB www.cheshirearchitects.com

Lot 4 Mataka Station
DP 323083
Rangihoua Road, Kerikeri 0294

RESOURCE CONSENT NOTES

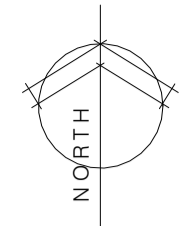
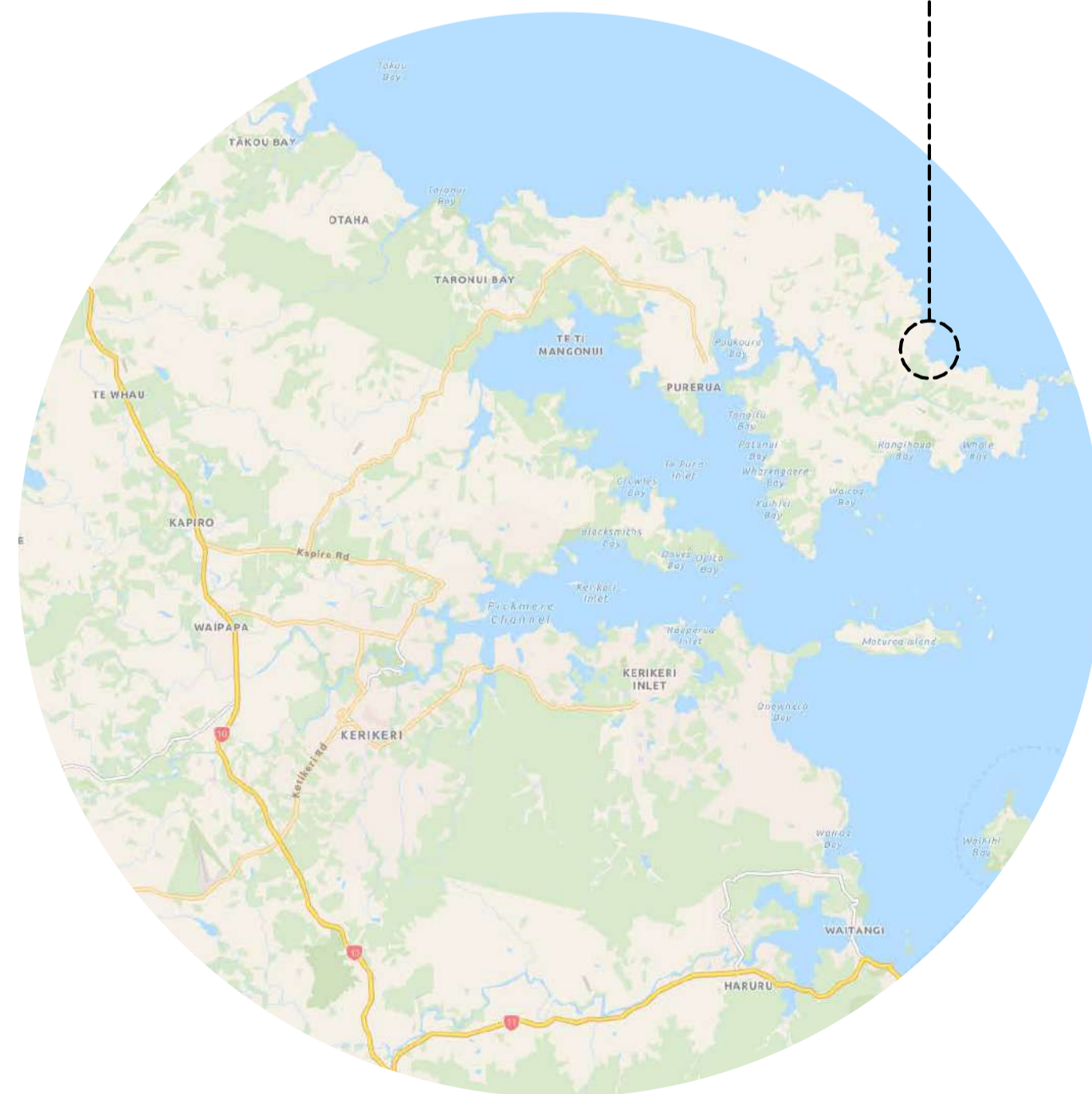
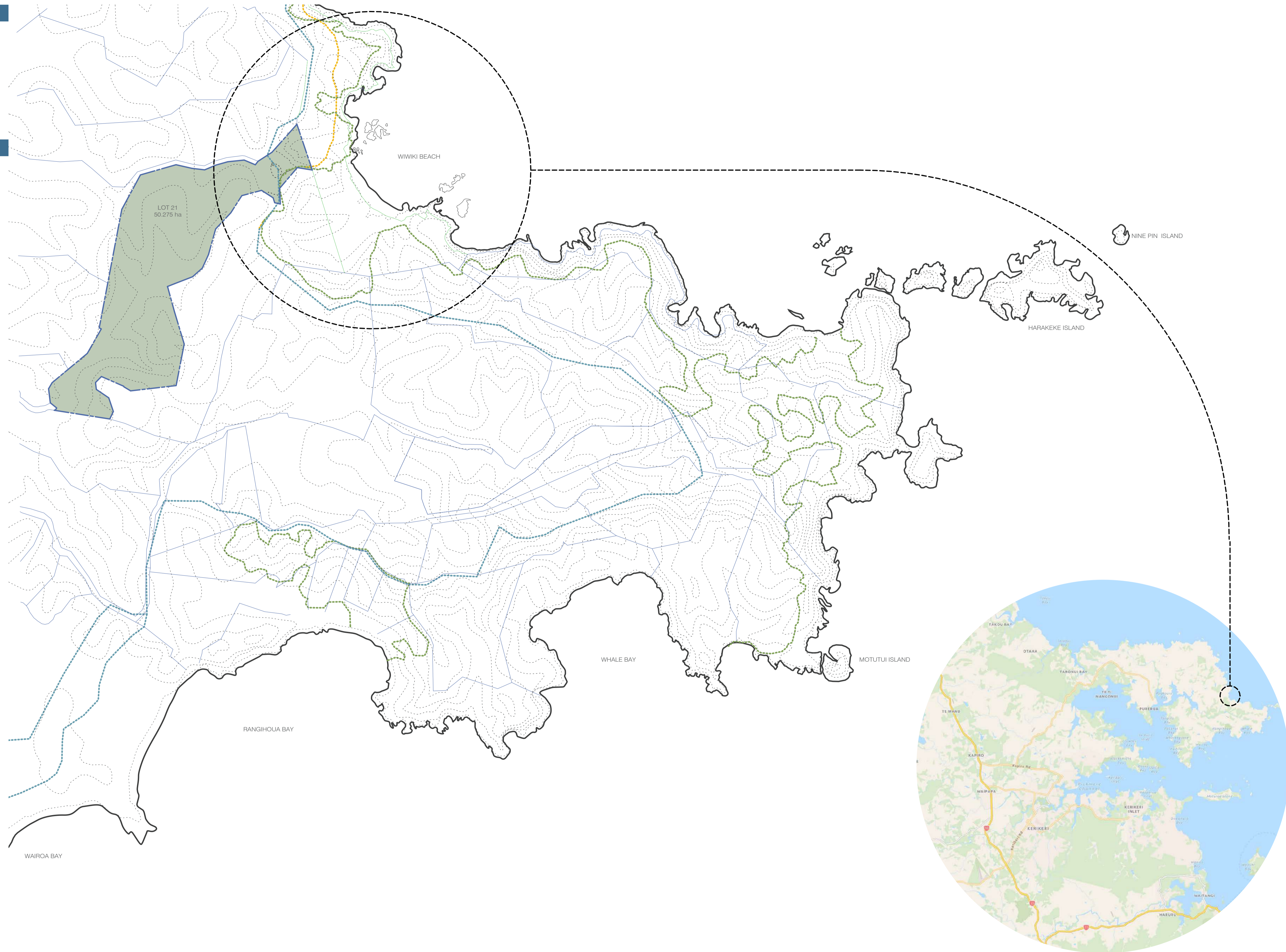
- FOR SITE PLANNING CONTROLS REFER TO APPROVED RESOURCE CONSENT REFERENCE NUMBER

SITE IDENTIFICATION

PARCEL : LOT 4
 LEGAL : DP323083
 CT : 92524
 ADDRESS : Mataka Station
 Rangihoua Road, Kerikeri, Far North
 SITE AREA : 57.4180ha
 ZONE : Rural coastal zone
 EQ ZONE : Zone 1
 EXPOSURE : Zone D
 CLIMATE : Zone 1
 WIND REG : A
 LEE ZONE :
 WINDZONE : Extra High
 RAINFALL : 80-90

PLANNING CONTROL KEY

- COASTAL ENVIRONMENT BOUNDARY
- OUTSTANDING NATURAL LANDSCAPE
- HIGH NATURAL CHARACTER
- HERITAGE AREA
Refer Far North District Plan
- NATURAL OPEN SPACE
Refer Far North District Plan



LOCAL AUTHORITY
 FAR NORTH DISTRICT COUNCIL
CONSULTANTS
STRUCTURE
 - Jensen McArlay & Associates
GEOTECH
 - PK Engineering
CIVIL
 - PK Engineering
LANDSCAPE
 - OZ Landscapes

SITE NOTES:

- ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC
- REGISTERED SURVEYOR TO CHECK ALL BOUNDARIES ARE ACCURATE & ESTABLISH GRIDS+LEVELS PRIOR TO CONSTRUCTION. ANY AMBIGUITIES TO BE REFERRED TO THE ARCHITECT
- SITE IS REGARDED AS 'SEASPRAY ZONE' THEREFORE ALL MATERIAL AND BUILDING ELEMENTS DURABILITY SHOULD PERFORM ADEQUATELY TO COMPLY WITH NZBC B2 AND SECTION 4 NZS:3604: 2011
- ALL NEW PRIVATE DRAINAGE WITHIN OUR BOUNDARY HAVE BEEN LOCATED ACCORDING TO ASSULTS. ALL PUBLIC DRAINAGE HAVE BEEN POSITIONED ACCORDING TO COUNCIL INFORMATION. ALL NEW AND EXISTING SERVICE ROUTES AND DRAINS ARE SHOWN INDICATIVELY ONLY. DRAINAGE CONTRACTOR TO LOCATE EXACT POSITION PRIOR TO CONSTRUCTION.
- ALL PLUMBING AND DRAINAGE WORK SHALL COMPLY WITH NZBC APPROVED DOCUMENTS NZBC:G13 & G14 OR AS/NZS:3500-2, WHERE BOTH SYSTEMS ARE USED IN CONJUNCTION. PIPE GRADIENTS, SIZES AND VENTING MUST COMPLY WITH WORST CASE REQUIREMENTS.
- ALL STORMWATER P&D TO COMPLY WITH NZBC:G1
- ALL WATER SUPPLY P&D TO COMPLY WITH NZBC:G12
- ALL SANITARY P&D TO COMPLY WITH NZBC:G13
- ALL P&D TO COMPLY WITH AS/NZS:3500:2.2
- ALL P&D ROUTES ARE SHOWN INDICATIVELY. CONTRACTOR TO DETERMINE EXACT ROUTES ON SITE. - REFER SW & DRAINAGE PLAN
- ALL CESSPITS TO BE LOCATED AT LOW POINTS WITH POSITIVE FALLS TOWARDS THEM.
- NOVAFLO COIL TO ALL RETAINING WALLS & FOUNDATIONS AS REQUIRED. ALL SUBSOIL DRAINS TO DISCHARGE VIA A SILT TRAP TO STORMWATER DRAINAGE SYSTEM.

A RC REVISION HISTORY: 2025_02_27

CHESHIRE

Cheshire Architects Limited
 Level 1 Hobson Towers West
 26-28 Hobson Street
 PO Box AMSC 90952
 Auckland
 New Zealand
 PH +64 9 358 2770
 FX +64 9 358 2771

www.cheshirearchitects.com
 PROJECT: No: 202336
MATAKA STATION
 Lot 4 Mataka Station
 DP 323083
 Rangihoua Road, Kerikeri 0294

Building Name
 SHEET:
SITE PLAN 1_1000

SCALES @ A1: As indicated
 REF:
 DRAWN/START DATE:
 DRWG No: **RC000** REVISION: **A**

DO NOT SCALE
 CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK
 COPYRIGHT © CHESHIRE ARCHITECTS LIMITED
 27/02/2025 2:54:00 pm

RESOURCE CONSENT NOTES

1. FOR SITE PLANNING CONTROLS REFER TO APPROVED RESOURCE CONSENT REFERENCE NUMBER

SITE IDENTIFICATION

PARCEL : LOT4
 LEGAL : DP323083
 CT : 92524
 ADDRESS : Mataka Station
 Rangihoua Road, Kerikeri, Far North
 SITE AREA : 57.418ha
 ZONE : Rural coastal zone
 EQ ZONE : Zone 1
 EXPOSURE : Zone 0
 CLIMATE : Zone 1
 WIND REG : A
 LEE ZONE :
 WINDZONE : Extra High
 RAINFALL : 80-90

PLANNING CONTROL KEY

COASTAL ENVIRONMENT BOUNDARY
 OUTSTANDING NATURAL LANDSCAPE
 HIGH NATURAL CHARACTER
 HERITAGE AREA
Refer Far North District Plan
 NATURAL OPEN SPACE
Refer Far North District Plan

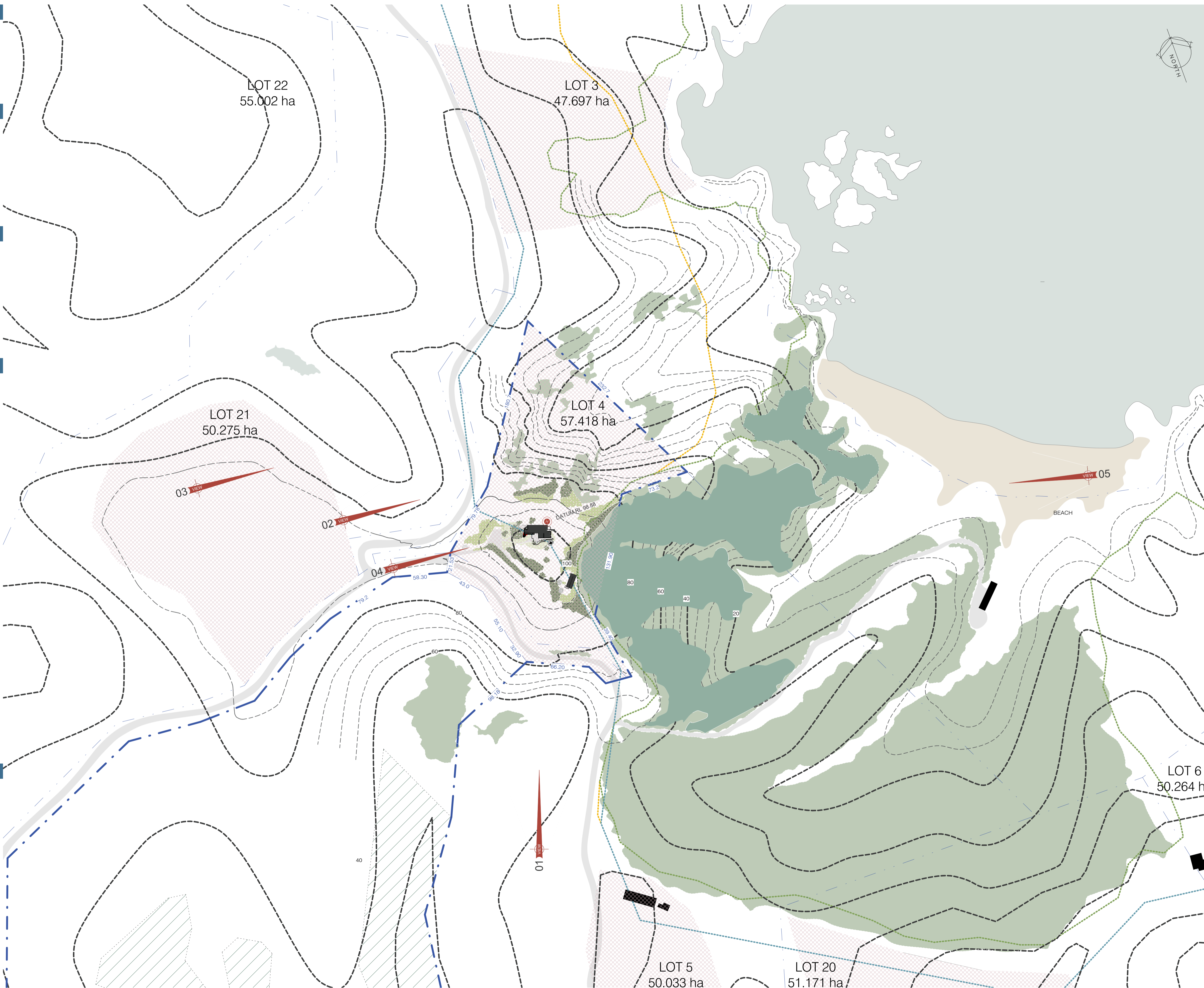
SITE LANDSCAPING KEY

PROPERTY BOUNDARY LINE
 ADJACENT TITLE BOUNDARY LINES
 BOUNDARY SETBACK LINE
 FIRE RISK SETBACK LINE (20m)
 EXISTING FENCE LINE
 PROPOSED NEW FENCE LINE
 REMOVED FENCE LINE
 SURVEYED DRIP LINES
 SEDIMENT CONTROL FENCE
 EXISTING EARTHWORKS EXTENTS
 SERVICES TRENCH
 STAKED PEG DATUM
 RIGHT OF WAY EASEMENTS
Refer DP323083 Title Plan
 LAND COVENANT
Refer DP323083 Title Plan
 DESIGNATED HOUSE SITES
Refer DP323083 Title Plan
 TYPICAL ROADING - CHIPSEAL
Secondary (Refer Spec)
 EXISTING NATURAL LANDSCAPE AREAS
Refer LINZ GIS data & district plan maps
 PROPOSED NATURAL LANDSCAPE AREAS
Refer O2 Landscape Documentation
 PROPOSED LOW FLAMABILITY PLANTING
Refer O2 Landscape Documentation
 PROPOSED GARDEN
Refer O2 Landscape Documentation

CIVIL & GEOTECH KEY

REFER GEOTECHNICAL REPORT:
PK Engineering GeoTech Report - 31/07/2023
 ZONE A
 Considered unsuitable for building where factor of safety is less than 1.0
 ZONE B
 Specific foundation design required here where the factor of safety is less than 1.5
 ZONE C
 Safe for standard foundation designs

REFER WASTEWATER REPORT:
TBC
 SW - OVERFLOW SOAKAGE PIT
Refer PK Engineering Documentation
 WW - EFFLUENT DISPOSAL AREA
Refer PK Engineering Documentation
 WW - RESERVE DISPOSAL AREA
Refer PK Engineering Documentation



LOCAL AUTHORITY
 FAR NORTH DISTRICT COUNCIL
CONSULTANTS
STRUCTURE
 - Jensen McArlay & Associates
GEOTECH
 - PK Engineering
CIVIL
 - PK Engineering
LANDSCAPE
 - O2 Landscapes

SITE NOTES:

- ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC
- REGISTERED SURVEYOR TO CHECK ALL BOUNDARIES ARE ACCURATE & ESTABLISH GRIDS+LEVELS PRIOR TO CONSTRUCTION. ANY AMBIGUITIES TO BE REFERRED TO THE ARCHITECT
- SITE IS REGARDED AS SEASPRAY ZONE THEREFORE ALL MATERIAL AND BUILDING ELEMENTS DURABILITY SHOULD PERFORM ADEQUATELY TO COMPLY WITH NZBC B2 AND SECTION 4 NZS-3604: 2011
- ALL NEW PRIVATE DRAINAGE WITHIN OUR BOUNDARY HAVE BEEN LOCATED ACCORDING TO ASBUILTS. ALL PUBLIC DRAINAGE HAVE BEEN POSITIONED ACCORDING TO COUNCIL INFORMATION. ALL NEW AND EXISTING SERVICE ROUTES AND DRAINS ARE SHOWN INDICATIVELY ONLY. DRAINAGE CONTRACTOR TO LOCATE EXACT POSITION PRIOR TO CONSTRUCTION.
- ALL PLUMBING AND DRAINAGE WORK SHALL COMPLY WITH NZBC APPROVED DOCUMENTS NZBC.G13 & G14 OR AS/NZS 3500.2, WHERE BOTH SYSTEMS ARE USED IN CONJUNCTION. PIPE GRADIENTS, SIZES AND VENTING MUST COMPLY WITH WORST CASE REQUIREMENTS.
- ALL STORMWATER P&D TO COMPLY WITH NZBC.E1
- ALL WATER SUPPLY P&D TO COMPLY WITH NZBC.G12
- ALL SANITARY P&D TO COMPLY WITH NZBC.G13
- ALL P&D TO COMPLY WITH AS/NZS 3500.2.2
- ALL P&D ROUTES ARE SHOWN INDICATIVELY. CONTRACTOR TO DETERMINE EXACT ROUTES ON SITE. REFER SW & DRAINAGE PLAN
- ALL CESSPITS TO BE LOCATED AT LOW POINTS WITH POSITIVE FALLS TOWARDS THEM.
- NOVAFLO COIL TO ALL RETAINING WALLS & FOUNDATIONS AS REQUIRED. ALL SUBSOIL DRAINS TO DISCHARGE VIA A SILT TRAP TO STORMWATER DRAINAGE SYSTEM.

A RC REVISION HISTORY: 2025_02_27

CHESHIRE

Cheshire Architects Limited
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 New Zealand
 PH +64 9 358 2770
 FX +64 9 358 2771

www.cheshirearchitects.com
 PROJECT: No: 202336
MATAKA STATION
 Lot 4 Mataka Station
 DP 323083
 Rangihoua Road, Kerikeri 0294

Building Name
 SHEET:
SITE PLAN - CONTEXT

SCALES @ A1: 1:2000
 REF:
 DRAWN/START DATE:
RC001
 REVISION:
A

DO NOT SCALE
 CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK
 COPYRIGHT © CHESHIRE ARCHITECTS LIMITED
 27/02/2025 2:55:29 pm

| SITE IDENTIFICATION | |
|---------------------|---|
| PARCEL | : LOT 4 |
| LEGAL | : DP323083 |
| CT | : 92524 |
| ADDRESS | : Mataka Station Rangihoua Road, Kerikeri, Far North |
| SITE AREA | : 57.4180ha |
| ZONE | : Rural coastal zone |
| EQ ZONE | : Zone 1 |
| EXPOSURE | : Zone D |
| CLIMATE | : Zone 1 |
| WIND REG | : A |
| LEE ZONE | : |
| WINDZONE | : Extra High |
| RAINFALL | : 80-90 |

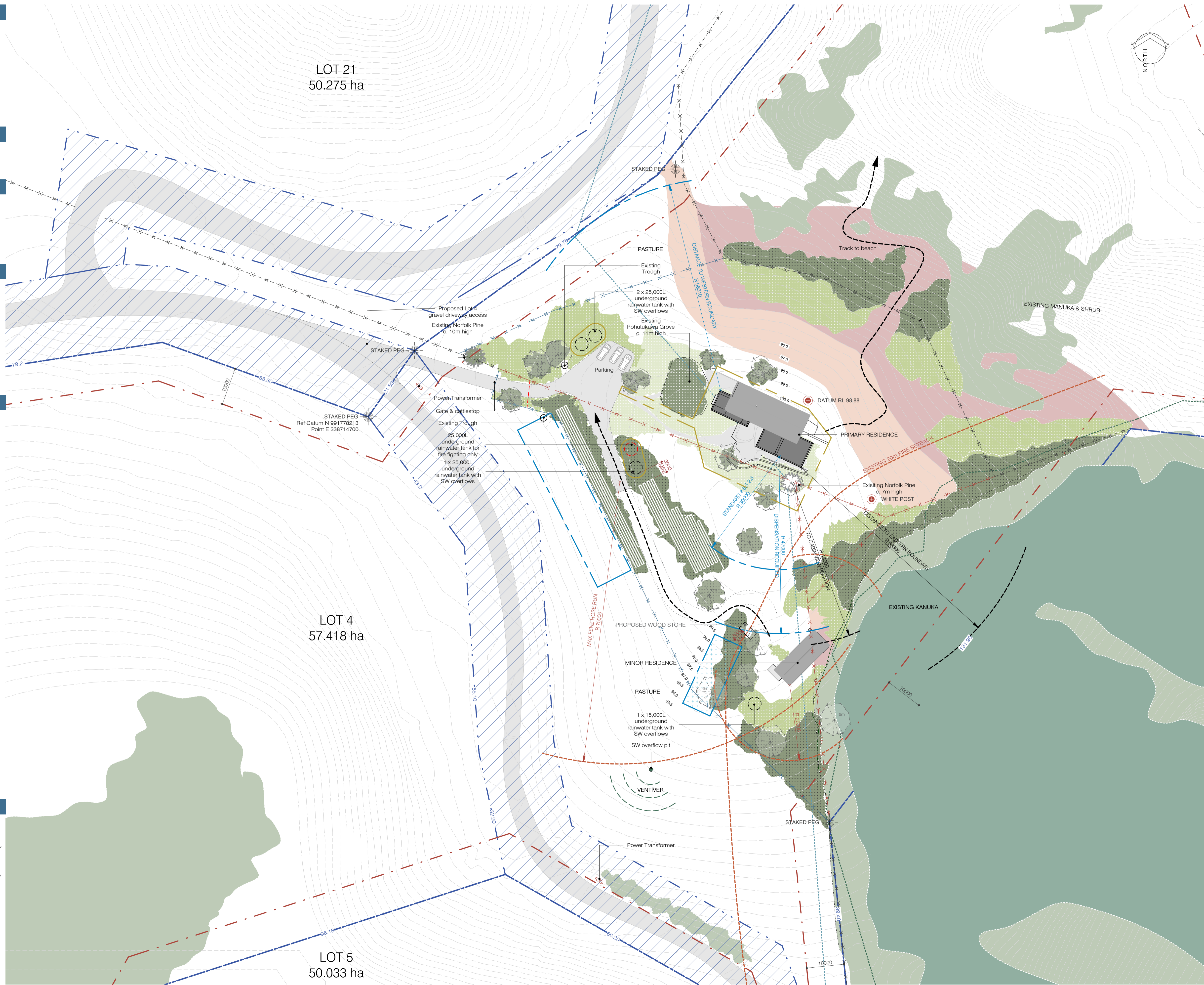
| WASTEWATER CONSENT NOTES | |
|--------------------------|---|
| 1. | FOR SITE PLANNING WASTE WATER CONTROLS REFER TO CIVIL WORKS DOCUMENTATION : <i>23-0384-B - Gilson Engineering (RO).pdf</i> |

| EARTHWORKS NOTES | |
|------------------|---|
| 1. | FOR PERMITTED SITE EXCAVATION EXTENTS REFER TO CIVIL WORKS DOCUMENTATION <i>23-0384 - Gilsons Earthworks Plans.pdf</i> |
| 2. | FNDC GRANTED EARTHWORKS PERMIT REFER TO REFERENCE # : 3000042-LGAEWK |

| PLANNING CONTROL KEY | |
|----------------------|--|
| | COASTAL ENVIRONMENT BOUNDARY |
| | OUTSTANDING NATURAL LANDSCAPE |
| | HIGH NATURAL CHARACTER |
| | HERITAGE AREA <i>Refer Far North District Plan</i> |
| | NATURAL OPEN SPACE <i>Refer Far North District Plan</i> |

| SITE LANDSCAPING KEY | |
|----------------------|---|
| | PROPERTY BOUNDARY LINE |
| | ADJACENT TITLE BOUNDARY LINES |
| | BOUNDARY SETBACK LINE |
| | FIRE RISK SETBACK LINE (20m) |
| | EXISTING FENCE LINE |
| | PROPOSED NEW FENCE LINE |
| | REMOVED FENCE LINE |
| | SURVEYED DRIP LINES |
| | SEDIMENT CONTROL FENCE |
| | EXISTING EARTHWORKS EXTENTS |
| | SERVICES TRENCH |
| | STAKED PEG |
| | DATUM |
| | RIGHT OF WAY EASEMENTS <i>Refer DP323083 Title Plan</i> |
| | LAND COVENANT <i>Refer DP323083 Title Plan</i> |
| | DESIGNATED HOUSE SITES <i>Refer DP323083 Title Plan</i> |
| | TYPICAL ROADING - CHIPSEAL <i>Secondary (Refer Spec)</i> |
| | EXISTING NATURAL LANDSCAPE AREAS <i>Refer LINZ GIS data & district plan maps</i> |
| | PROPOSED NATURAL LANDSCAPE AREAS <i>Refer O2 Landscape Documentation</i> |
| | PROPOSED LOW FLAMABILITY PLANTING <i>Refer O2 Landscape Documentation</i> |
| | PROPOSED GARDEN <i>Refer O2 Landscape Documentation</i> |

| CIVIL & GEOTECH KEY | |
|--|---|
| REFER GEOTECHNICAL REPORT: <i>23-0384-B - Gilson Engineering (RO).pdf</i> | |
| | ZONE A <i>Considered unsuitable for building where factor of safety is less than 1.0</i> |
| | ZONE B <i>Specific foundation design required here where the factor of safety is less than 1.5</i> |
| | ZONE C <i>Safe for standard foundation designs</i> |
| REFER WASTEWATER REPORT: <i>23-0384-B - Gilson Engineering (RO).pdf</i> | |
| | SW - OVERFLOW SOAKAGE PIT <i>Refer PK Engineering Documentation</i> |
| | WW - EFFLUENT DISPOSAL AREA <i>Refer PK Engineering Documentation</i> |
| | WW - RESERVE DISPOSAL AREA <i>Refer PK Engineering Documentation</i> |



| LOCAL AUTHORITY | |
|---|--|
| FAR NORTH DISTRICT COUNCIL | |
| CONSULTANTS | |
| STRUCTURE - Jensen McArdy & Associates | |
| GEOTECH - PK Engineering | |
| CIVIL - PK Engineering | |
| LANDSCAPE - O2 Landscapes | |

- SITE NOTES:**
- ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC
 - REGISTERED SURVEYOR TO CHECK ALL BOUNDARIES ARE ACCURATE & ESTABLISH GRIDS - LEVELS PRIOR TO CONSTRUCTION. ANY AMBIGUITIES TO BE REFERRED TO THE ARCHITECT.
 - SITE IS REGARDED AS SEASPRAY ZONE THEREFORE ALL MATERIAL AND BUILDING ELEMENTS DURABILITY SHOULD PERFORM ADEQUATELY TO COMPLY WITH NZBC B2 AND SECTION 4 NZS:3604: 2011.
 - ALL NEW PRIVATE DRAINAGE WITHIN OUR BOUNDARY HAVE BEEN LOCATED ACCORDING TO ASBUILTS. ALL PUBLIC DRAINAGE HAVE BEEN POSITIONED ACCORDING TO COUNCIL INFORMATION. ALL NEW AND EXISTING SERVICE ROUTES AND DRAINS ARE SHOWN INDICATIVELY ONLY. DRAINAGE CONTRACTOR TO LOCATE EXACT POSITION PRIOR TO CONSTRUCTION.
 - ALL PLUMBING AND DRAINAGE WORK SHALL COMPLY WITH NZBC APPROVED DOCUMENTS NZBC:G13 & G14 OR ASINZS:3500:2 WHERE BOTH SYSTEMS ARE USED IN CONJUNCTION. PIPE GRADIENTS, SIZES AND VENTING MUST COMPLY WITH WORST CASE REQUIREMENTS.
 - ALL STORMWATER P&D TO COMPLY WITH NZBC: E1
 - ALL WATER SUPPLY P&D TO COMPLY WITH NZBC: G12
 - ALL SANITARY P&D TO COMPLY WITH NZBC: G13
 - ALL P&D TO COMPLY WITH ASINZS:3500:2.2
 - ALL P&D ROUTES ARE SHOWN INDICATIVELY. CONTRACTOR TO DETERMINE EXACT ROUTES ON SITE. REFER SW & DRAINAGE PLAN.
 - ALL CESSPITS TO BE LOCATED AT LOW POINTS WITH POSITIVE FALLS TOWARDS THEM.
 - NOVAFLO COIL TO ALL RETAINING WALLS & FOUNDATIONS AS REQUIRED. ALL SUBSOIL DRAINS TO DISCHARGE VIA A SILT TRAP TO STORMWATER DRAINAGE SYSTEM.

A RC REVISION HISTORY: 2025_02_27

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PROJECT: No: 202336
MATAKA STATION
Lot 4 Mataka Station
DP 323083
Rangihoua Road, Kerikeri 0294

Building Name
SHEET:
SITE PLAN - LANDSCAPING

SCALES @ A1: 1 : 500
REF:
DRAWN/START DATE:
DRWG No: RC002 REVISION: A
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WASTEWATER CONSENT NOTES

1. FOR SITE PLANNING WASTE WATER CONTROLS REFER TO CIVIL WORKS DOCUMENTATION :
23-0384-B - Gilsen Engineering (RO).pdf

EARTHWORKS NOTES

1. FOR PERMITTED SITE EXCAVATION EXTENTS REFER TO CIVIL WORKS DOCUMENTATION :
23-0384 - Gilsen Earthworks Plans.pdf

2. FNDC GRANTED EARTHWORKS PERMIT REFER TO REFERENCE # :
3000042-LGAE1W

AREA PLAN NOTES

1. AREA CALCULATIONS ARE ADVISORY ONLY AND RELATE TO AN ARCHITECTURAL DEVELOPED DESIGN STAGE. ALL AREA FIGURES MAY VARY SUBJECT TO FURTHER COORDINATION OF BUILDING STRUCTURE, SERVICES AND FACADE, AND SHOULD NOT BE RELIED UPON.

A. EXCEPT MINOR DWELLING AREA FIGURES - SUBJECT TO MAX CONSTRAINTS OF FNDC OPERATIVE PLAN
a. As Per Rule 8.6.5.2.3

B. EARTHWORKS CALCULATIONS
a. As Per EARTHWORKS PERMIT - 3000042-LGAE1W

2. FIGURES ARE FOR REFERENCE ONLY, AND SHOULD BE CHECKED AND VERIFIED BY A LICENSED SURVEYOR.

PRIMARY DWELLING GFA FOOTPRINT = 254m²
PRIMARY DWELLING COVERAGE = 278m²
MINOR DWELLING GFA FOOTPRINT = 52m²
MINOR DWELLING COVERED STORAGE = 18m²
MINOR DWELLING COVERAGE = 70m²

SITE LANDSCAPING KEY

- PROPERTY BOUNDARY LINE
- ADJACENT TITLE BOUNDARY LINES
- BOUNDARY SETBACK LINE
- FIRE RISK SETBACK LINE (20m)
- EXISTING FENCE LINE
- PROPOSED NEW FENCE LINE
- REMOVED FENCE LINE
- SURVEYED DRIP LINES
- SEDIMENT CONTROL FENCE
- EXISTING EARTHWORKS EXTENTS
- SERVICES TRENCH
- STAKED PEG
- DATUM
- RIGHT OF WAY EASEMENTS
Refer DP323083 Title Plan
- LAND COVENANT
Refer DP323083 Title Plan
- DESIGNATED HOUSE SITES
Refer DP323083 Title Plan
- TYPICAL ROADING - CHIPSEAL
Secondary (Refer Spec)
- EXISTING NATURAL LANDSCAPE AREAS
Refer LINZ GIS data & district plan maps
- PROPOSED NATURAL LANDSCAPE AREAS
Refer O2 Landscape Documentation
- PROPOSED LOW FLAMMABILITY PLANTING
Refer O2 Landscape Documentation
- PROPOSED GARDEN
Refer O2 Landscape Documentation

CIVIL & GEOTECH KEY

- REFER GEOTECHNICAL REPORT:
23-0384-B - Gilsen Engineering (RO).pdf
- ZONE A
Considered unsuitable for building where factor of safety is less than 1.0
 - ZONE B
Specific foundation design required here where the factor of safety is less than 1.5
 - ZONE C
Safe for standard foundation designs
- REFER WASTEWATER REPORT:
23-0384-B - Gilsen Engineering (RO).pdf
- SW - OVERFLOW SOAKAGE PIT
Refer PK Engineering Documentation
 - WW - EFFLUENT DISPOSAL AREA
Refer PK Engineering Documentation
 - WW - RESERVE DISPOSAL AREA
Refer PK Engineering Documentation



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CIVIL
- PK Engineering
LANDSCAPE
- O2 Landscapes

- SITE NOTES:**
1. ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC
 2. REGISTERED SURVEYOR TO CHECK ALL BOUNDARIES ARE ACCURATE & ESTABLISH GRIDS+LEVELS PRIOR TO CONSTRUCTION. ANY AMBIGUITIES TO BE REFERRED TO THE ARCHITECT
 3. SITE IS REGARDED AS SEASPRAY ZONE THEREFORE ALL MATERIAL AND BUILDING ELEMENTS DURABILITY SHOULD PERFORM ADEQUATELY TO COMPLY WITH NZBC B2 AND SECTION 4 NZS-3604: 2011
 4. ALL NEW PRIVATE DRAINAGE WITHIN OUR BOUNDARY HAVE BEEN LOCATED ACCORDING TO ASSULTS. ALL PUBLIC DRAINAGE HAVE BEEN POSITIONED ACCORDING TO COUNCIL INFORMATION. ALL NEW AND EXISTING SERVICE ROUTES AND DRAINS ARE SHOWN INDICATIVELY ONLY. DRAINAGE CONTRACTOR TO LOCATE EXACT POSITION PRIOR TO CONSTRUCTION.
 5. ALL PLUMBING AND DRAINAGE WORK SHALL COMPLY WITH NZBC APPROVED DOCUMENTS NZBC-G13 & G14 OR AS/NZS 3500-2, WHERE BOTH SYSTEMS ARE USED IN CONJUNCTION. PIPE GRADIENTS, SIZES AND VENTING MUST COMPLY WITH WORST CASE REQUIREMENTS.
 6. ALL STORMWATER P&D TO COMPLY WITH NZBC-E1
 7. ALL WATER SUPPLY P&D TO COMPLY WITH NZBC-G12
 8. ALL SANITARY P&D TO COMPLY WITH NZBC-G13
 9. ALL P&D TO COMPLY WITH AS/NZS 3500-2.2
 10. ALL P&D ROUTES ARE SHOWN INDICATIVELY. CONTRACTOR TO DETERMINE EXACT ROUTES ON SITE. - REFER SW & DRAINAGE PLAN
 11. ALL CESSPITS TO BE LOCATED AT LOW POINTS WITH POSITIVE FALLS TOWARDS THEM.
 12. NOVAFLO COIL TO ALL RETAINING WALLS & FOUNDATIONS AS REQUIRED. ALL SUBSOIL DRAINS TO DISCHARGE VIA A SILT TRAP TO STORMWATER DRAINAGE SYSTEM.

A RC REVISION HISTORY: 2025_02_27

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PROJECT: No: 202336
MATAKA STATION
Lot 4 Mataka Station
DP 323083
Rangihoua Road, Kerikeri 0294

Building Name
SHEET:
SITE PLAN - DWELLINGS

SCALES @ A1: 1:200
REF:
DRAWN/NOT DATE:
DRWG No: RC003
REVISION: A
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RESOURCE CONSENT NOTES

- FOR SITE PLANNING CONTROLS REFER TO APPROVED RESOURCE CONSENT REFERENCE NUMBER

GENERAL KEY

ELEMENTAL ENCLOSURE KEY:
-refer elevations/sections

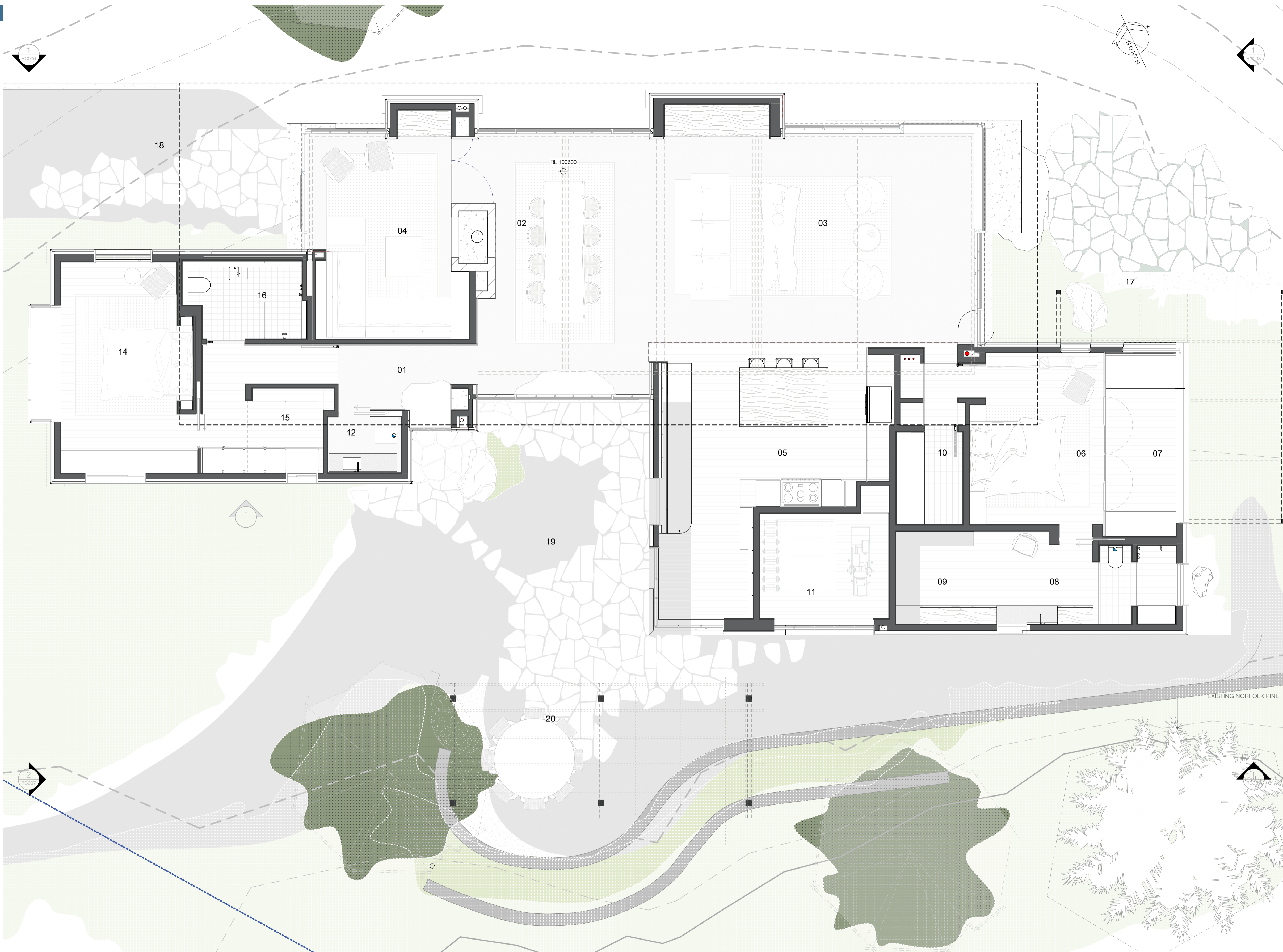
ELEMENT 0 00-00

SELECTION 0000-0-00 → CBI CLASS KEYNOTE

- 00 FLOOR TYPE FINISH
- G01 W01 KEYNOTE / WALL TYPE
- D1.01 DOOR REFERENCE, REF. DOOR SCHEDULE
- W1.01 WINDOW REFERENCE, REF. JOINERY SCHEDULE
- RL 2000 EXISTING SPOT LEVEL
- RL 2000 NEW SPOT LEVEL
- SL 2000 SLAB / SUBSTRATE LEVEL
- FFL+20 FINISHED FLOOR LEVEL (ABOVE SLAB)
- SP STRUCTURAL POST
- DP DOWNPIPE
- ST PLUMBING STACK
- VP PLUMBING VENT PIPE
- HT HOSE TAP
- ORG OVERFLOW RELIEF GULLY
- TV TERMINAL VENT
- CD CHANNEL DRAIN
- DW DISHWASHER
- HWC HOT WATER CYLINDER
- SK SINK
- WC TOILET
- WHB WASH HAND BASIN

ROOM KEY

- 01 ENTRANCE LOBBY
- 02 DINING ROOM
- 03 LIVING ROOM
- 04 LIVING DEN
- 05 KITCHEN
- 06 MASTER SUITE
- 07 SUNROOM
- 08 MASTER ENSUITE
- 09 MASTER WARDROBE
- 10 LAUNDRY
- 11 GYM
- 12 POWDER ROOM
- 13 GUEST CIRCULATION
- 14 GUEST SUITE
- 15 GUEST WARDROBE
- 16 GUEST BATHROOM
- 17 EASTERN TERRACE
- 18 WESTERN TERRACE
- 19 COURTYARD
- 20 PERGOLA



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- O2 Landscapes

FLOOR PLAN NOTES

- ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC.
- READ DRAWINGS IN CONJUNCTION WITH DRAWINGS AND SPECIFICATIONS FROM THE ARCHITECT, STRUCTURAL, HYDRAULIC, MECHANICAL, FIRE, ACUSTIC, THERMAL & FIRE PROTECTION CONSULTANTS.
- REFER TO RELEVANT ARCHITECTURAL PLANS FOR SET-OUTS & SPECIFIC COMPLIANCE NOTES
- SITE IS REGARDED AS SEASPRAY ZONE THEREFORE ALL MATERIALS AND BUILDING ELEMENTS DURABILITY SHOULD PERFORM ADEQUATELY TO COMPLY WITH B2 OF THE NZBC AND SECTION 4 NZS 3604 2011.
- ALL DOWNPIPE & GUTTER SIZES TO COMPLY WITH NZS E1 AS1
- ALL MEMBRANE ROOFS & DECKS ABOVE 40m² SHALL HAVE PROPRIETARY VENTS, INSTALLED TO MANUFACTURERS SPECIFICATIONS. LOCATIONS TO BE DETERMINED ON SITE BY ARCHITECT
- DO NOT SCALE OF DRAWINGS. CONFIRM SIZE & SCALE OF DRAWING
- CONFIRM ANY CONFLICTING INFORMATION WITH ARCHITECT PRIOR TO ORDERING MATERIALS OR COMMENCING CONSTRUCTION

A RC REVISION HISTORY: 2025_02_27

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www.cheshirearchitects.com
PROJECT: No: 202336
MATAKA STATION
DP 223083
Rangihoua Road, Kerikeri 0294

Building Name
SHEET:
GA FLOOR PLAN

SCALES @ A1: 1:50
REF:
DRAWN/START DATE:
RC004
REVISION:
A

LININGS & SUBSTRATES

| | | |
|----|--------------|--|
| L1 | 3827E-4.2.3 | 12mm Ecoply FB structural square edge plywood wall substrate - H3.2 CCA treated CD grade |
| L2 | 3827E-4.2.13 | 12mm Ecoply FB structural plywood square edge wall substrate - untreated CD grade |
| L3 | 5133-4.1.4 | 13mm USG BORAL Fibrock Aqua-Tough board lining wall substrate |
| L4 | 5133-4.1.5 | 13mm USG BORAL Fibrock Aqua-Tough board lining wall substrate with Mapei waterproofing syste |
| L5 | 5133G-4.1.2 | 1 x layer 10mm Gib Standard board lining wall substrate, laid vertically |

LININGS & SUBSTRATES

| | | |
|-----|--------------|---|
| L6 | 5133G-4.6.2 | 1 x layer 10mm Gib Bracoline/Noiseline board lining wall substrate, laid vertically |
| L7 | 5133G-4.1.7 | 1 x layer 13mm Gib Wideline board lining wall substrate, laid horizontally, stoppped to F4 finish |
| L8 | 5133G-4.4.2 | 1 x layer 13mm Gib Standard board lining ceiling substrate with back blocking, taped & stoppped to F4 finish |
| L9 | 5122PL-4.1.1 | 15mm Plytech Armourpanel blackbutt CD grade laid Georgian style with solid hardwood stiles & mutins, sanded & prefinished with Osmo Poly-X oil, adhesive fix with Sikabond T55J |
| L10 | 5122PL-4.1.2 | 15mm Plytech Armourpanel blackbutt CD grade with V-grooves, sanded & prefinished with Osmo Poly-X oil, adhesive fix with Sikabond T55J |
| L11 | 5122PL-4.1.2 | 25mm Panelling overlay to match cabinetry |

FINISHES

| | | |
|----|------------|---|
| F1 | 6734D-4.3 | Two coat Dryens Woodal semi transparent stain, Colour TBC (1 coat factory applied, 1 coat site applied) |
| F2 | 6734ST-4.6 | Three coat Sikens Cetol® HLSE & Filter 7+ coating stain system, colour TBC |
| F3 | 6734D-4.4 | Two coat Dryens Woodmaster semi transparent stain, Colour TBC (1 coat factory applied, 1 coat site applied) |
| F4 | 6734D-4.4 | Two coat Dryens Woodmaster semi transparent stain, Colour TBC (1 coat factory applied, 1 coat site applied) |
| F5 | 6734OP-4.5 | Two coats Osmo Poly-X Oil Raw, (2 coat site applied) |
| F6 | 6721-4.3 | 2 Coats Aalto Ultimate Interior Matt paint finish, Colour TBC |

FINISHES

| | | |
|-----|-------------|--|
| F7 | 6721-4.4 | 2 Coats Aalto Ultimate Interior Matt paint finish, Colour TBC |
| F8 | 6721-4.5 | 2 Coats Aalto Ultimate Interior Matt paint finish, Colour TBC |
| F9 | 6721-4.6 | 2 Coats Aalto Ultimate Interior Matt paint finish, Colour TBC |
| F10 | 6221M-4.4.1 | Material Space Inax Fabe OX 11mm thick ceramic textured wall tile (227mm x 60mm) - Vertically laid |
| F12 | 6731-4.1.1 | Celecrete 'Cemher Microdur' microcement coating applied as bagged finish to blockwork fireplace - colour TBC |
| F20 | 6700R-4.1 | Cemher microcement topping screed with mesh interlayer and 2 coat satin W2F sealer |

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27/02/2025 2:56:41 pm

RESOURCE CONSENT NOTES

1. FOR SITE PLANNING CONTROLS REFER TO APPROVED RESOURCE CONSENT REFERENCE NUMBER

GENERAL KEY

ELEMENTAL ENCLOSURE KEY:
-refer elevations/sections

ELEMENT 0 00-00

SELECTION 0 00-00

0000-0.00 - CBI CLASS KEYNOTE

00 FLOOR TYPE FINISH

G01 W01 KEYNOTE / WALL TYPE

D1.01 DOOR REFERENCE, REF. DOOR SCHEDULE

W1.01 WINDOW REFERENCE, REF. JOINERY SCHEDULE

RL 2000 EXISTING SPOT LEVEL

RL 2000 NEW SPOT LEVEL

SL 2000 SLAB / SUBSTRATE LEVEL

FFL+20 FINISHED FLOOR LEVEL (ABOVE SLAB)

SP STRUCTURAL POST

DP DOWNPIPE

ST PLUMBING STACK

VP PLUMBING VENT PIPE

HT HOSE TAP

ORG OVERFLOW RELIEF GULLY

TV TERMINAL VENT

CD CHANNEL DRAIN

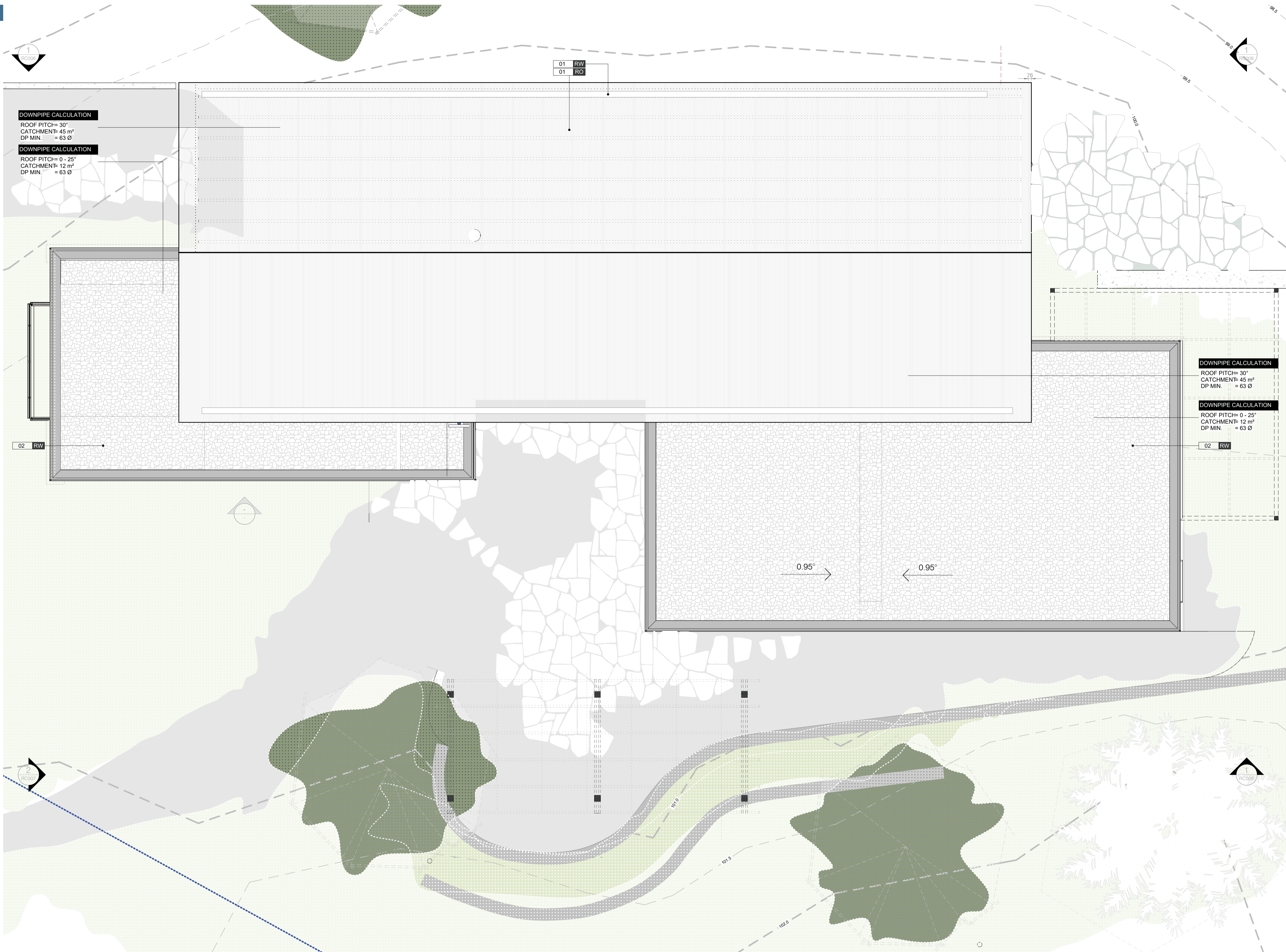
DW DISHWASHER

HWC HOT WATER CYLINDER

SK SINK

WC TOILET

WHB WASH HAND BASIN



LOCAL AUTHORITY
FAR NORTH DISTRICT COUNCIL

CONSULTANTS
STRUCTURE
- Jensen McArlley & Associates
GEOTECH
- PK Engineering
CIVIL
- PK Engineering
LANDSCAPE
- O2 Landscapes

ROOF NOTES

1. ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC.
2. ALL ROOF FLASHINGS AND ROOF FLASHING DETAILS TO COMPLY WITH NZBC E2.
3. ALL ROOF PENETRATIONS AND ROOF PENETRATION DETAILS TO COMPLY WITH NZBC E2.
4. READ DRAWINGS IN CONJUNCTION WITH DRAWINGS AND SPECIFICATIONS FROM THE ARCHITECT, STRUCTURAL, HYDRAULIC, MECHANICAL, FIRE, ACOUSTIC, THERMAL & FIRE PROTECTION CONSULTANTS.
5. ALL FITTINGS TO BE OF GOOD QUALITY FOR PURPOSE.
6. ALL DP & GUTTER SIZES TO COMPLY WITH NZBC E1.

A RC 2025_02_27
REVISION HISTORY:

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www.cheshirearchitects.com

PROJECT: No: 202336

MATAKA STATION
Lot 4 Mataka Station
DP 323083
Rangihoua Road, Kerikeri 0294

Building Name

SHEET:

ROOF PLAN 1_50

SCALES @ A1: 1:50

REF:

DRAWN/START DATE:

DRWG No: REVISION:

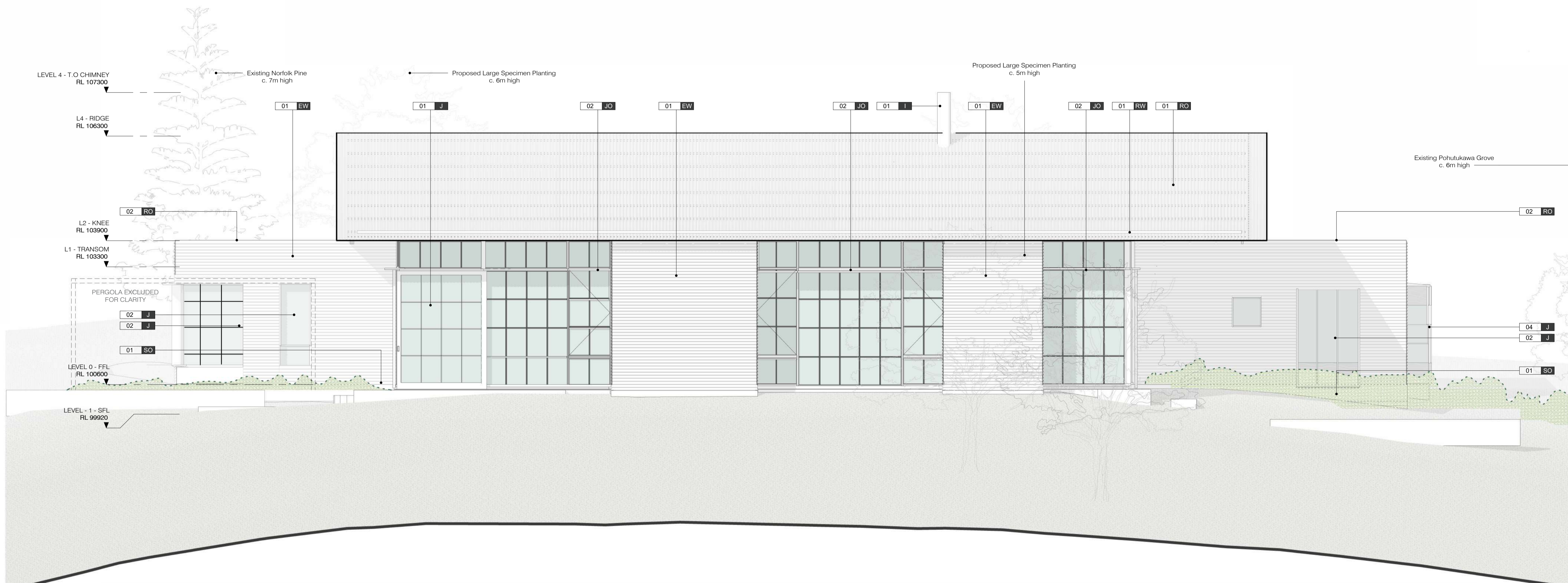
RC005 A

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ELEVATION NOTES
 ELEMENTAL ENCLOSURE KEY:
 refer elevations/sections

ELEMENT 0 00-00-0

SELECTION 9

0000-0-00 → CBI CLASS KEYNOTE

1. ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC.
2. READ DRAWINGS IN CONJUNCTION WITH DRAWINGS AND SPECIFICATIONS FROM THE ARCHITECT, STRUCTURAL, HYDRAULIC, MECHANICAL, FIRE, ACUSTIC, LANDSCAPE, CIVIL, THERMAL & FIRE PROTECTION CONSULTANTS.
3. ALL MATERIALS DETAILED ARE TO COMPLY WITH THEIR CURRENT MANUFACTURERS SPECIFICATIONS AND ARE TO BE INSTALLED BY A NOMINATED INSTALLER IF REQUIRED.
4. ALL DOCUMENTED SPECIFICATIONS TO BE CROSS CHECKED AGAINST CONTRACT SPECIFICATIONS PRIOR TO ANY WORK COMMENCING.

A RC 2025_02_27
 REVISION HISTORY:

CONCISE ENCLOSURE - ELEMENTAL KEY

| | | | | | |
|--|--|---|--|--|---|
| <p>SO 01 → STRUCTURE 01 - PRIMARY FOUNDATIONS</p> <p>3102FC 120mm thick 30Mpa Firth EC30 econix reinforced insitu concrete floor slab - refer to structural engineers drawings</p> <p>4161T-4.1.1 Thermakrat Thermathene Orange 0.3mm thick damp proof membrane concrete underlay</p> <p>4711EXP-4.10 100mm EXPOL ThermoShield-H underfloor insulation (R-2.78)</p> <p>2244-4.2 30mm compacted aggregate sand blinding layer</p> <p>2244-4.1 Min 150mm - 600mm deep compacted hardfill on grade</p> <p>SO 02 → STRUCTURE 02 - PRIMARY FOUNDATIONS</p> <p>2362-4.1.1 315mm (w) x x 420mm (h) 30Mpa Thermally broken slab edge with nib - refer to structural engineers details</p> <p>3321F-4.1.4 Firth 25 Series - 240mm exterior masonry blockwork - to structural engineers design</p> <p>2361-4.4.1 FB1 300d x 400v 30MPa perimeter foundation beam (TYP) - refer to structural engineers details</p> <p>SO 03 → STRUCTURE 03 - TERRACE FOUNDATIONS</p> <p>3102-4.7.1 120mm thick 30Mpa reinforced insitu concrete floor slab - [refer to structural engineers drawings]</p> <p>4161T-4.1.1 Thermakrat Thermathene Orange 0.3mm thick damp proof membrane concrete underlay</p> <p>2244-4.2 30mm compacted aggregate sand blinding layer</p> <p>2244-4.1 Min 150mm - 600mm deep compacted hardfill on grade</p> <p>SO 04 → STRUCTURE 04 - STRUCTURAL ROOF FRAMING (Enclosed)</p> <p>3821-4.3.15 240x45mm H1.2 SGB timber purlins @ 600 crs, nogs at 600crs</p> <p>3821-4.6.1 350x80mm Greenheart timber ridge beam to engineers design, rough circular sawn finish & rebated fixings</p> <p>3821-4.6.2 300x80mm Greenheart timber rafters @ 2400 crs to engineers design, rough circular sawn finish & rothbliss UVT fixings</p> <p>3821-4.6.3 200x80mm Greenheart timber 'fake' rafters @ alternative 2400mm crs to engineers design, rough circular sawn finish & rothbliss concealed fixings</p> <p>3821-4.6.4 360x55mm Greenheart timber continuous eaves beam to internal perimeter @ rafter knee connection to engineers design, rough circular sawn finish & rebated UVT fixings</p> <p>3813F-4.1.11 2/300x65mm H1.2 CHH Hyspan laminated timber continuous eaves beam to internal perimeter @ rafter knee connection</p> <p>3821-4.6.5 2/220x65mm Greenheart timber chords @ 2400 crs to engineers design, rough circular sawn finish & rebated fixings</p> <p>SO 05 → STRUCTURE 05 - STRUCTURAL ROOF FRAMING (Enclosed)</p> <p>3821-4.3.15 240x45mm H3.2 SGB Continuous roofing rafters with Spax HI.FORCE 6x140mm delta seal washer head screw fixings</p> <p>3821-4.6.1 350x80mm Greenheart timber ridge beam to engineers design, rough circular sawn finish & rebated fixings</p> | <p>EW 01 → EXTERIOR WALL & CLADDING 01 - HORIZONTAL BB WB</p> <p>4221-4.5.1 90 X 44mm Custom splaycut WRC Horizontal bevelback weatherboard cladding (BSF & pre-weathered) - [refer spec]</p> <p>3821-4.5.2 45x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ 600crs]</p> <p>4161-4.1.1 VaproShield WrapShield SA, self-adhered, water resistive vapor permeable air barrier sheet membrane, with 100x25x3mm VaproShim SA Neoprene drainage shims</p> <p>3827E-4.2.3 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade</p> <p>4711T-4.2.1 140mm Terra Lana Thermal pads R3.2 wool semi-rigid wall insulation (600crs)</p> <p>3821-4.1.1 H1.2 SGB Exterior timber wall framing, refer framing plan for sizing</p> <p>EW 02 → EXTERIOR WALL & CLADDING 02 - HORIZONTAL SHIPLAP</p> <p>4221-4.2.1 90 X 44mm Custom splaycut WRC Horizontal shiplap weatherboard cladding (BSF & pre-weathered) - [refer spec]</p> <p>3821-4.5.2 45x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ 600crs]</p> <p>4161-4.1.1 VaproShield WrapShield SA, self-adhered, water resistive vapor permeable air barrier sheet membrane, with 100x25x3mm VaproShim SA Neoprene drainage shims</p> <p>3827E-4.2.3 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade</p> <p>4711T-4.2.1 140mm Terra Lana Thermal pads R3.2 wool semi-rigid wall insulation (600crs)</p> <p>3821-4.1.1 H1.2 SGB Exterior timber wall framing, refer framing plan for sizing</p> <p>RW 01 → ROOF TYPE 01 - CORRUGATE METAL</p> <p>Roofing Industries 'True Oak Deep' 0.55 mm BMT with 'Ambro Euxormax' Schist coloured corrugated steel profile, fixed as per manufacturers specifications.</p> <p>3821-4.5.4.1 70x45mm H3.2 SGB Continuous structural castellated cavity battens with Spax HI.FORCE 6x140mm delta seal washer head screw fixings</p> <p>4161PC1-4.1.1 SOLITEX® Mento 3000 weather resistive roofing barrier</p> <p>4337E-4.1.9 21mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec]</p> <p>3821-4.3.12 90x45 H1.2 SGB timber ventilating purlin joist, refer roof framing plan for set-out - to structural engineer's design</p> <p>RW 02 → RAINWATER TYPE 02 - TYPICAL METAL ROOF GUTTER</p> <p>7411-4.1.1 Custom formed concealed aluminium gutter with overflows and rainwater head</p> <p>7411MA-4.1.1 Malfay 85mm dia Optim downpipes adhesive jointed to cast in place puddle flanges</p> | <p>RO 02 → ROOF TYPE 02 - STONE BALLAST & MEMBRANE</p> <p>3102-4.7.1 40mm depth loose laid ballast 60kg/m river pebbles up to 30mm diameter (selection TBC)</p> <p>4421N-4.1.4 Nuramat Green Drain 20SRXS3c3g geo-composite drainage and water attenuation layer</p> <p>4421N-4.1.5 1 x layer Macacifer Bidem Green non-woven geotextile layer for free drainage and protection of membrane below ballast layer</p> <p>4421N-4.1.1 Nuraltite torch applied roll-roofing membrane in 2-layer configuration of 3PB-SA base sheet & 3PG cap sheet coated with 2 x coats of Nuraglaze coating for potable water supply</p> <p>4421N-4.2.1 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec]</p> <p>4421N-4.1.3 Nuraply ALU vapour barrier with full laps and taped joints</p> <p>3827E-4.4.2 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec]</p> <p>RW 02 → RAINWATER TYPE 02 - TYPICAL MEMBRANE ROOF GUTTER</p> <p>3102-4.7.1 40mm depth loose laid ballast 60kg/m river pebbles up to 30mm diameter (selection TBC)</p> <p>4421N-4.1.4 Nuramat Green Drain 20SRXS3c3g geo-composite drainage and water attenuation layer</p> <p>4421N-4.1.5 1 x layer Macacifer Bidem Green non-woven geotextile layer for free drainage and protection of membrane below ballast layer</p> <p>4421N-4.1.1 Nuraltite torch applied roll-roofing membrane in 2-layer configuration of 3PB-SA base sheet & 3PG cap sheet coated with 2 x coats of Nuraglaze coating for potable water supply</p> <p>4421N-4.2.2 Nuraltite Enertherm PIR tapered insulation board - min 140mm up to 185mm to form 1_100 slope, allow for 50mm PIR board to upstands</p> <p>4421N-4.1.3 Nuraply ALU vapour barrier with full laps and taped joints</p> <p>3827E-4.4.2 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec]</p> | <p>J 01 → JOINERY 01 - EXTERIOR TIMBER SLIDERS</p> <p>4511-4.6.1 Iroko hardwood timber sliding doors with Brio 'Timberoll 300N' bottom rolling door hardware, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with NZS4223</p> <p>J 02 → JOINERY 02 - EXTERIOR TIMBER CASEMENT & FIXED</p> <p>4511-4.7.1 Iroko hardwood timber fixed glazing & side hung casement windows with Schegel four-bar S/S friction stays, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with NZS4223</p> <p>J 03 → JOINERY 03 - EXTERIOR TIMBER HINGED DOORS</p> <p>4511-4.8.1 Iroko hardwood timber hinge doors with S/S bronze coloured hinges, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with NZS4223</p> <p>J 04 → JOINERY 04 - EXTERIOR TIMBER BAY WINDOW</p> <p>4511-4.7.2 Iroko hardwood timber fixed glazing & side hung casement bay window with Schegel four-bar S/S friction stays, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with NZS4223</p> <p>J 05 → JOINERY 05 - INTERIOR TIMBER FRENCH DOORS</p> <p>5231-4.2.1 Iroko hardwood interior french door</p> <p>4612-4.1.1 Clear 8mm toughened glass to comply with NZS4223.</p> | <p>C 01 → CEILING 01 - SOLID TIMBER T&G - RAKING (INT)</p> <p>3821-4.4 70x45mm H1.2 SGB Timber ceiling battens @ 400cr to underside of structural roof framing.</p> <p>5124-4.4.1 130x20mm BBS solid WRC select knot T&G boards prefinished with Osmo Poly-X oil - Bandsawn rustic finish</p> <p>C 02 → CEILING 02 - SOLID TIMBER T&G - FLAT (INT)</p> <p>3821-4.2.20 90x45 H1.2 SGB Interior timber stud as ceiling hanger - to structural engineer's design</p> <p>3821-4.4.1.1 140x45 H1.2 SGB timber joist, refer floor framing plan for set-out</p> <p>3821-4.4.2 70x45 H1.2 SGB timber ceiling batten @ max 400crs structurally fixed to framing</p> <p>3821-4.4.3 70x45mm H1.2 SGB Timber ceiling battens on ends @ 400cr to underside of structural roof framing</p> <p>5124-4.4.1 130x20mm BBS solid WRC select knot T&G boards prefinished with Osmo Poly-X oil - Bandsawn rustic finish</p> <p>C 03 → CEILING 03 - SOLID TIMBER T&G - SOFFIT (EXT)</p> <p>3821-4.2.20 90x45 H1.2 SGB Interior timber stud as ceiling hanger - to structural engineer's design</p> <p>3821-4.4.1.1 140x45 H1.2 SGB timber joist, refer floor framing plan for set-out</p> <p>4161PC1-4.1.1 Proclima® Solitex® Etasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings</p> <p>3821-4.4.3 70x45mm H3.2 SGB KD timber soffit battens @ 400crs to underside of structural ceiling framing</p> <p>5124-4.4.1 130x20mm BBS solid WRC select knot T&G boards prefinished with Osmo Poly-X oil - Bandsawn rustic finish</p> <p>C 04 → CEILING 04 - GIB - CEILING (INT)</p> <p>3821-4.4.1 40x45 H1.2 SGB interior timber ceiling batten @ max 600crs</p> <p>5133G-4.4.2 1 x layer 13mm Gib Standard board lining ceiling substrate with back blocking, taped & stopped to F4 finish</p> <p>C 05 → CEILING 05 - EXPOSED SOLID TIMBER BEAMS (INT)</p> <p>3821-4.6.2 200x80mm Greenheart timber continuous eaves beam to internal perimeter @ rafter knee connection to engineers design, rough circular sawn finish</p> <p>3821-4.6.7 50x50mm Greenheart timber butterfly blocking @ 1480mm staggered crs, rough circular sawn finish & nail fixings.</p> | <p>F 01 → FLOOR TYPE 01 - INTERIOR CONCRETE SCREED</p> <p>6700R-4.1 Cemher microcement topping screed with mesh interlayer and 2 coat satin W2F sealer</p> <p>6221M-4.6.2 62mm of 'Ezymix' EM490 Anhydrite self leveling floor screed</p> <p>F 02 → FLOOR TYPE 02 - INTERIOR SOLID TIMBER T&G</p> <p>6311-4.3.1 Select Solid 90x19mm T&G Spotted Gum Hardwood flooring, distressed & prefinished with OSMO hard wax oil and secret fixed/glued</p> <p>5433E-4.2.3 2 Layer/19mm Ecoply F8 structural square edge plywood floor substrate laid in 400mm squares (H3.2 CCA CD grade), adhesive fix with Sikabond T55J - [refer spec]</p> <p>4421N-4.1.5 Sikabond T55J for adhesive fixing of ply to slab</p> <p>F 03 → FLOOR TYPE 03 - INTERIOR TILED 01</p> <p>6221M-4.3.1 8mm Material Space Aurule - Azuchi unglazed, 95x95mm square</p> <p>6221M-4.8.1 Mapei Kerabond Plus and additive isolastic exterior paving adhesive</p> <p>6221M-4.10.1 Mapei Mapelastic Aquardefense waterproofing membrane system</p> <p>6221M-4.5.1 Mapecem screed laid to fall - [refer spec]</p> <p>F 04 → FLOOR TYPE 05 - EXTERIOR TILED</p> <p>6221M-4.3.1 40mm circular sawn cut Taranaki Andesite stone crazy paving, layout to be determined, including extent of recessed grouting</p> <p>3102-4.9.1 60mm thick 17.5Mpa concrete for concealed bedding to paving units</p> <p>8420-4.1.2 100mm loose laid stone aggregate between stone pavers</p> <p>2242-4.1.2 Min 100mm layer of compacted GAP20 basecourse</p> <p>I 01 → FIREPLACE & CHIMNEY - INTERIOR FIREPLACE</p> <p>3321F-4.1.4 Firth 20 Series - Half height 190mm interior masonry blockwork structure, laid loose - to structural engineer's design</p> <p>6731-4.1.1 Celecrite Cemher Microdur microcement coating applied as bagged finish to blockwork fireplace - colour TBC</p> <p>4511-4.6.1 Chimenees Philippe Radiante 1001 DF double steel sided fireplace, with min 225mm dia S/S flue kit & custom directional bird cowl</p> |
|--|--|---|--|--|---|

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PROJECT: No: 202336
MATAKA STATION
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Building Name
 SHEET:
ELEVATION - NORTH

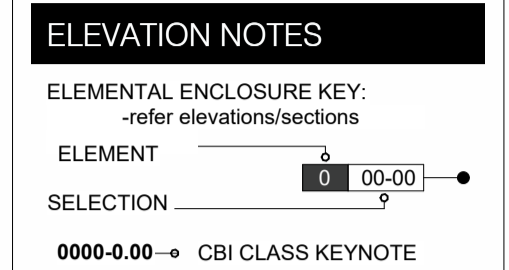
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RC006
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 CONTRACTOR MUST VERIFY ALL DIMENSIONS ON
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RC SUBMISSION -



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FAR NORTH DISTRICT COUNCIL
CONSULTANTS
STRUCTURE
- Jensen McArlay & Associates
GEOTECH
- PK Engineering
CIVIL
- PK Engineering
LANDSCAPE
- OZ Landscapes



- 1. ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC.
- 2. READ DRAWINGS IN CONJUNCTION WITH DRAWINGS AND SPECIFICATIONS FROM THE ARCHITECT, STRUCTURAL, HYDRAULIC, MECHANICAL, FIRE, ACOUSTIC, LANDSCAPE, CIVIL, THERMAL & FIRE PROTECTION CONSULTANTS.
- 3. ALL MATERIALS DETAILED ARE TO COMPLY WITH THEIR CURRENT MANUFACTURERS SPECIFICATIONS AND ARE TO BE INSTALLED BY A NOMINATED INSTALLER IF REQUIRED.
- 4. ALL DOCUMENTED SPECIFICATIONS TO BE CROSS CHECKED AGAINST CONTRACT SPECIFICATIONS PRIOR TO ANY WORK COMMENCING.

CONCISE ENCLOSURE - ELEMENTAL KEY

| Code | Description | Code | Description | Code | Description | Code | Description | Code | Description |
|--------------|--|--------------|---|--------------|---|--------------|--|----------------|---|
| SO 01 | STRUCTURE 01 - PRIMARY FOUNDATIONS | EW 01 | EXTERIOR WALL & CLADDING 01 - HORIZONTAL BB WB | RO 02 | ROOF TYPE 02 - STONE BALLAST & MEMBRANE | J 01 | JOINERY 01 - EXTERIOR TIMBER SLIDERS | C 01 | CEILING 01 - SOLID TIMBER T&G - RAKING (INT) |
| 3102FC | 120mm thick 30Mpa Firth EC30 ecomix reinforced insitu concrete floor slab - refer to structural engineers drawings | 4221-4.5.1 | 90 X 44mm Custom splaycut WRC Horizontal bevelback weatherboard cladding (BSF & pre-weathered) - [refer spec] | 3102-4.7.1 | 40mm depth loose laid ballast 60kg/m river pebbles up to 30mm diameter (selection TBC) | 4511-4.6.1 | Iroko hardwood timber sliding doors with Brio 'Timberroll 3000' bottom rolling door hardware, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes | 3821-4.4 | 70x45mm H1.2 SGB Timber ceiling battens @ 400cr to underside of structural roof framing. |
| 4161T-4.1.1 | Thermakraft Thermathene Orange 0.3mm thick damp proof membrane concrete underlay | 3821-4.5.2 | 45x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ 600crs | 4421N-4.1.4 | Nuramat Green Drain 20SRXSSc3g geo-composite drainage and water attenuation layer | 4610AG-4.3.2 | 1 x layer Macalferl Bidem Green non-woven geotextile layer for free drainage and protection of membrane below ballast layer | 5124-4.4.1 | 130x20mm BBS solid WRC 'select knot' T&G boards prefinished with Osmo Poly-X oil - Bandsawn rustic finish |
| 4711EXP-4.10 | 100mm EXPOL ThermaStab-H underfloor insulation (R-2.78) | 4161-4.1.1 | VaproShield WrapShield SA, self-adhered, water resistive vapor permeable air barrier sheet membrane, with 100x25x3mm VaproShim SA Neoprene drainage shims | 4421N-4.1.5 | 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade | | | NZS4223 | |
| 2244-4.2 | 30mm compacted aggregate sand blinding layer | 3827E-4.2.3 | 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade | 4421N-4.1.1 | 140mm Terra Lana Thermal pads R3.2 wool semi-rigid wall insulation (600crs) | J 02 | JOINERY 02 - EXTERIOR TIMBER CASEMENT & FIXED | C 02 | CEILING 02 - SOLID TIMBER T&G - FLAT (INT) |
| 2244-4.1 | Min 150mm - 600mm deep compacted hardfill on grade | 4711T-4.2.1 | H1.2 SGB Exterior timber wall framing, refer framing plan for sizing | 4421N-4.2.1 | Nuralite Enotherm PIR tapered insulation board - min 100mm up to 185mm to form 1° slope | 4511-4.7.1 | Iroko hardwood timber fixed glazing & side hung casement windows with Schegel four-bar S/S friction stays, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes | 3821-4.2.20 | 90x45 H1.2 SGB Interior timber stud as ceiling hanger - to structural engineer's design |
| SO 02 | STRUCTURE 02 - PRIMARY FOUNDATIONS | EW 02 | EXTERIOR WALL & CLADDING 02 - HORIZONTAL SHIPLAP | RW 02 | RAINWATER TYPE 02 - TYPICAL MEMBRANE ROOF GUTTER | J 03 | JOINERY 03 - EXTERIOR TIMBER HINGED DOORS | C 03 | CEILING 03 - SOLID TIMBER T&G - SOFFIT (EXT) |
| 2362-4.1.1 | 315mm (w) x x 420mm (h) 30MPa Thermally broken slab edge with rib - refer to structural engineers details | 4221-4.2.1 | 90 X 44mm Custom splaycut WRC Horizontal shiplap weatherboard cladding (BSF & pre-weathered) - [refer spec] | 3102-4.7.1 | 40mm depth loose laid ballast 60kg/m river pebbles up to 30mm diameter (selection TBC) | 4511-4.8.1 | Iroko hardwood timber hinge doors with S/S bronze coloured hinges, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes | 3821-4.2.20 | 90x45 H1.2 SGB Interior timber stud as ceiling hanger - to structural engineer's design |
| 3321F-4.1.4 | Firth 25 Series - 240mm exterior masonry blockwork - to structural engineers design | 3821-4.5.2 | 45x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ 600crs | 4421N-4.1.4 | Nuramat Green Drain 20SRXSSc3g geo-composite drainage and water attenuation layer | 4610AG-4.3.2 | 1 x layer Macalferl Bidem Green non-woven geotextile layer for free drainage and protection of membrane below ballast layer | 3821-4.4.11 | 140x45 H1.2 SGB timber joist, refer floor framing plan for set-out |
| 2361-4.4.1 | FB1 300d x 400w 30MPa perimeter foundation beam (TYP) - refer to structural engineers details | 3827E-4.2.3 | 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade | 4421N-4.1.5 | 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade | | | 3821-4.4.2 | 70x45 H1.2 SGB timber ceiling batten @ max 400crs structurally fixed to framing |
| SO 03 | STRUCTURE 03 - TERRACE FOUNDATIONS | 4711T-4.2.1 | H1.2 SGB Exterior timber wall framing, refer framing plan for sizing | 4421N-4.1.1 | 140mm Terra Lana Thermal pads R3.2 wool semi-rigid wall insulation (600crs) | J 04 | JOINERY 04 - EXTERIOR TIMBER BAY WINDOW | 3821-4.4.3 | 70x45mm H1.2 SGB Timber ceiling battens on ends @ 400cr to underside of structural roof framing |
| 3102-4.7.1 | 120mm thick 30Mpa reinforced insitu concrete floor slab - [refer to structural engineers drawings] | 3827E-4.4.2 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | 4421N-4.1.3 | Nuralite Enotherm PIR tapered insulation board - min 100mm up to 185mm to form 1° slope | 4610AG-4.3.2 | 1 x layer Macalferl Bidem Green non-woven geotextile layer for free drainage and protection of membrane below ballast layer | 5124-4.4.1 | 130x20mm BBS solid WRC 'select knot' T&G boards prefinished with Osmo Poly-X oil - Bandsawn rustic finish |
| 4161T-4.1.1 | Thermakraft Thermathene Orange 0.3mm thick damp proof membrane concrete underlay | 4421N-4.1.4 | 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade | 4511-4.7.2 | Iroko hardwood timber fixed glazing & side hung casement bay window with Schegel four-bar S/S friction stays, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes | | | NZS4223 | |
| 2244-4.2 | 30mm compacted aggregate sand blinding layer | 4421N-4.1.1 | 140mm Terra Lana Thermal pads R3.2 wool semi-rigid wall insulation (600crs) | 4610AG-4.3.2 | 1 x layer Macalferl Bidem Green non-woven geotextile layer for free drainage and protection of membrane below ballast layer | J 05 | JOINERY 05 - INTERIOR TIMBER FRENCH DOORS | 3821-4.4.1 | 40x45 H1.2 SGB Interior timber stud as ceiling hanger - to structural engineer's design |
| 2244-4.1 | Min 150mm - 600mm deep compacted hardfill on grade | 4421N-4.2.2 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | 4511-4.7.1 | Iroko hardwood timber fixed glazing & side hung casement bay window with Schegel four-bar S/S friction stays, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes | 4612-4.1.1 | Nuraply ALU vapour barrier with full laps and taped joints | 3821-4.4.11 | 140x45 H1.2 SGB timber joist, refer floor framing plan for set-out |
| SO 04 | STRUCTURE 04 - STRUCTURAL ROOF FRAMING (Enclosed) | 4421N-4.2.1 | 140mm Terra Lana Thermal pads R3.2 wool semi-rigid wall insulation (600crs) | | | | | 4161PC1-4.1.1 | Proclima® Solitex® Etasana breathable wall protection membrane with Tescon Estora & Extosol flashing tape to joints & openings |
| 3821-4.3.15 | 240x45mm H1.2 SGB timber purlins @ 600 crs, nogs at 600crs | 4421N-4.1.3 | Nuralite Enotherm PIR tapered insulation board - min 140mm up to 185mm to form 1.00 slope, allow for 50mm PIR board to upstands | C 04 | CEILING 04 - GIB - CEILING (INT) | | | 3821-4.4.1 | 200x80mm Greenheart timber continuous eaves beam to internal perimeter @ rafter knee connection to engineers design, rough circular sawn finish |
| 3821-4.6.1 | 350x80mm Greenheart timber ridge beam to engineers design, rough circular sawn finish & rebated fixings. | 4421N-4.1.4 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | J 05 | JOINERY 05 - INTERIOR TIMBER FRENCH DOORS | | | 5133G-4.4.2 | 1 x layer 13mm Gib. Standard board lining ceiling substrate with back blocking, taped & stopped to F4 finish |
| 3821-4.6.2 | 300x80mm Greenheart timber rafters @ 2400 crs to engineers design, rough circular sawn finish & rebated UVT fixings | 4421N-4.1.5 | 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade | | | | | 3821-4.4.1 | 40x45 H1.2 SGB timber ceiling batten @ max 600crs |
| 3821-4.6.3 | 200x80mm Greenheart timber 'fake' rafters @ alternative 2400mm crs to engineers design, rough circular sawn finish & rebated concealed fixings. | 4421N-4.1.1 | 140mm Terra Lana Thermal pads R3.2 wool semi-rigid wall insulation (600crs) | | | | | 3821-4.4.2 | 1 x layer 13mm Gib. Standard board lining ceiling substrate with back blocking, taped & stopped to F4 finish |
| 3821-4.6.4 | 360x55mm Greenheart timber continuous eaves beam to internal perimeter @ rafter knee connection to engineers design, rough circular sawn finish & rebated UVT fixings. | 4421N-4.2.2 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | | | | | 3821-4.4.1 | 40x45 H1.2 SGB timber ceiling batten @ max 600crs |
| 3813F-4.1.11 | 2/300x65mm H1.2 CHH HySPAN laminated timber continuous eaves beam to internal perimeter @ rafter knee connection | 4421N-4.2.1 | 140mm Terra Lana Thermal pads R3.2 wool semi-rigid wall insulation (600crs) | | | | | 5133G-4.4.2 | 1 x layer 13mm Gib. Standard board lining ceiling substrate with back blocking, taped & stopped to F4 finish |
| 3821-4.6.5 | 2/220x65mm Greenheart timber chords @ 2400 crs to engineers design, rough circular sawn finish & rebated fixings. | 4421N-4.2.2 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | | | | | 3821-4.4.1 | 40x45 H1.2 SGB timber ceiling batten @ max 600crs |
| SO 05 | STRUCTURE 05 - STRUCTURAL ROOF FRAMING (Enclosed) | 4421N-4.2.2 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | | | | | 5133G-4.4.2 | 1 x layer 13mm Gib. Standard board lining ceiling substrate with back blocking, taped & stopped to F4 finish |
| 3821-4.3.15 | 240x45mm H3.2 SGB Continuous roofing rafters with Spax HI.FORCE 6x140mm delta seal washer head screw fixings | 4421N-4.2.2 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | | | | | 3821-4.4.1 | 40x45 H1.2 SGB timber ceiling batten @ max 600crs |
| 3821-4.6.1 | 350x80mm Greenheart timber ridge beam to engineers design, rough circular sawn finish & rebated fixings. | 4421N-4.2.2 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | | | | | 5133G-4.4.2 | 1 x layer 13mm Gib. Standard board lining ceiling substrate with back blocking, taped & stopped to F4 finish |
| | | 4421N-4.2.2 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | | | | | 3821-4.4.1 | 40x45 H1.2 SGB timber ceiling batten @ max 600crs |
| | | 4421N-4.2.2 | 19mm Ecoply roofing F8 structural plywood substrate with staggered sheet layout and sheet edge fixings to engineers requirements - H3.2 CCA treated DD grade [Refer Spec] | | | | | 5133G-4.4.2 | 1 x layer 13mm Gib. Standard board lining ceiling substrate with back blocking, taped & stopped to F4 finish |

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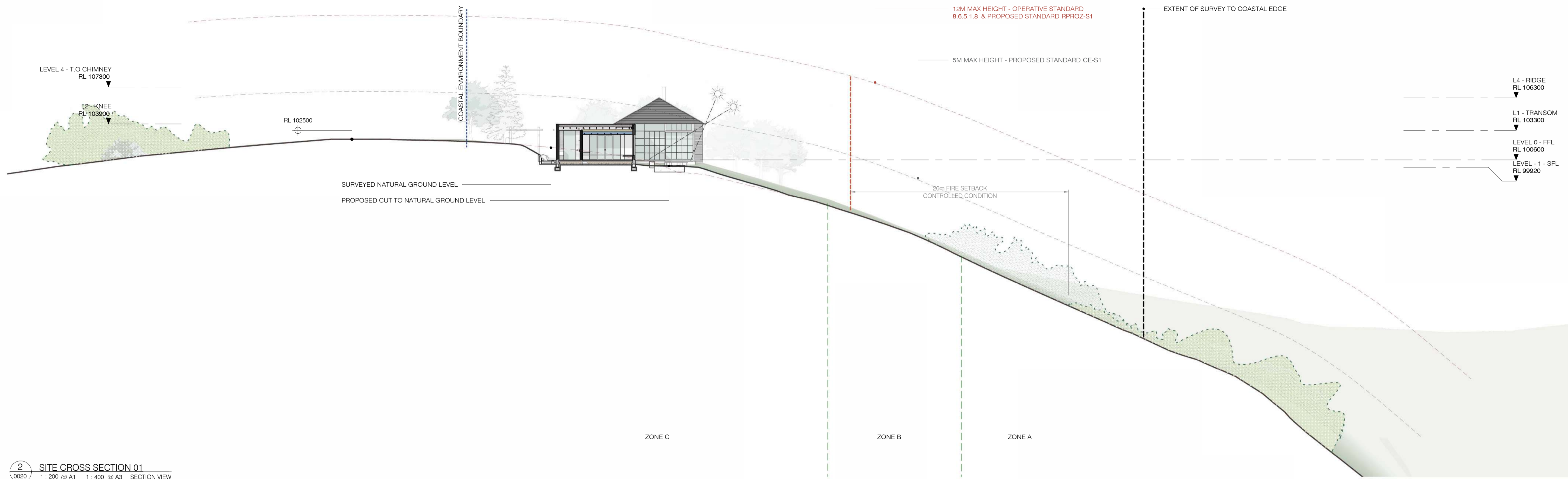
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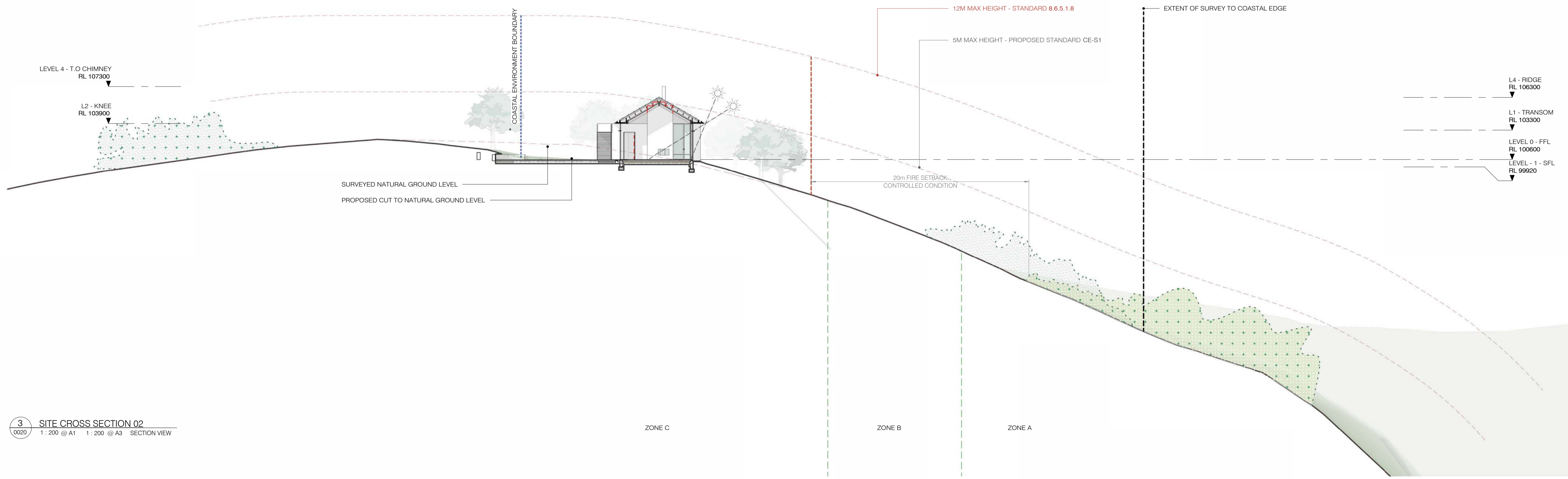
Building Name
SHEET:
ELEVATION - EAST
SCALES @ A1: 1: 50
REF:
DRAWN/NOT DATE:
DRWG No: RC008
REVISION: A

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2 SITE CROSS SECTION 01
1:200 @ A1 1:400 @ A3 SECTION VIEW



3 SITE CROSS SECTION 02
1:200 @ A1 1:200 @ A3 SECTION VIEW

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STRUCTURE
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SECTION NOTES

- ELEMENTAL ENCLOSURE KEY:
refer elevations/sections
- ELEMENT
- SELECTION
- 0000-0-00 -> CBI CLASS KEYNOTE
1. ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC.
 2. READ DRAWINGS IN CONJUNCTION WITH DRAWINGS AND SPECIFICATIONS FROM THE ARCHITECT, STRUCTURAL, HYDRAULIC, MECHANICAL, FIRE, ACOUSTIC, LANDSCAPE, CIVIL, THERMAL & FIRE PROTECTION CONSULTANTS.
 3. ALL MATERIALS DETAILED ARE TO COMPLY WITH THEIR CURRENT MANUFACTURERS SPECIFICATIONS AND ARE TO BE INSTALLED BY A NOMINATED INSTALLER IF REQUIRED
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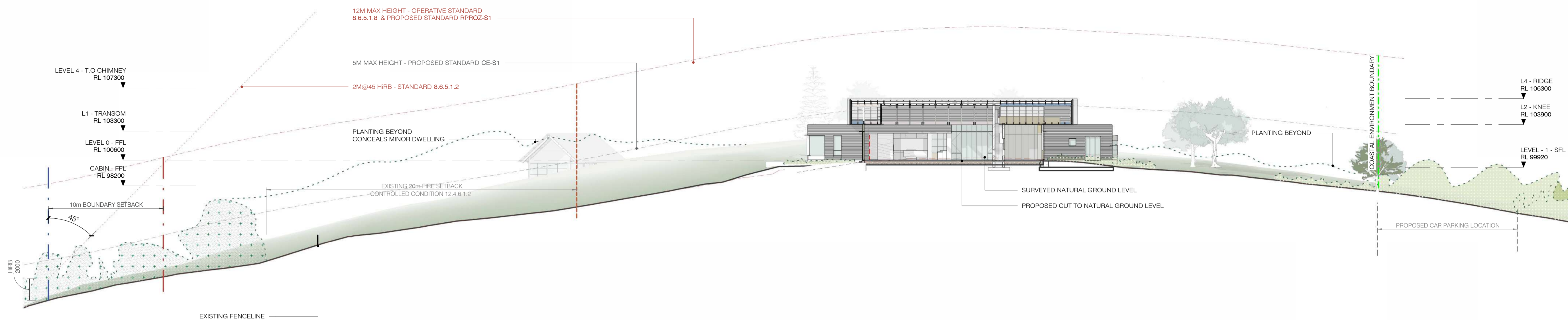
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Building Name
SHEET:
SITE - CROSS SECTIONS

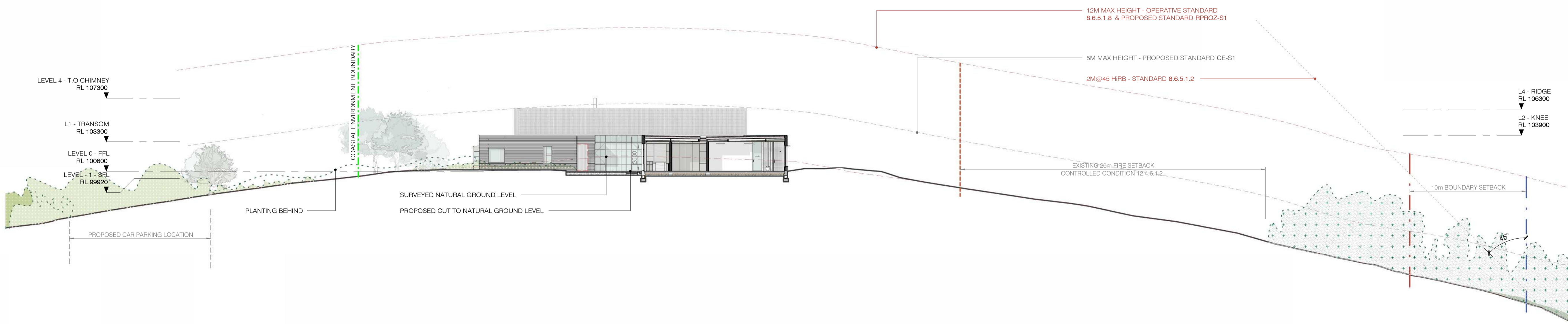
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REF:
DRAWN/START DATE:
DRWG No: **RC010** REVISION: **A**

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2 SITE LONG SECTION 01
 1:200 @ A1 1:400 @ A3 SECTION VIEW



1 SITE LONG SECTION 02
 1:200 @ A1 1:400 @ A3 SECTION VIEW

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SECTION NOTES

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Building Name
 SHEET:
SITE - LONG SECTIONS

SCALES @ A1: 1:200
 REF:
 DRAWN/START DATE:
 DRWG No: RC011 REVISION: A
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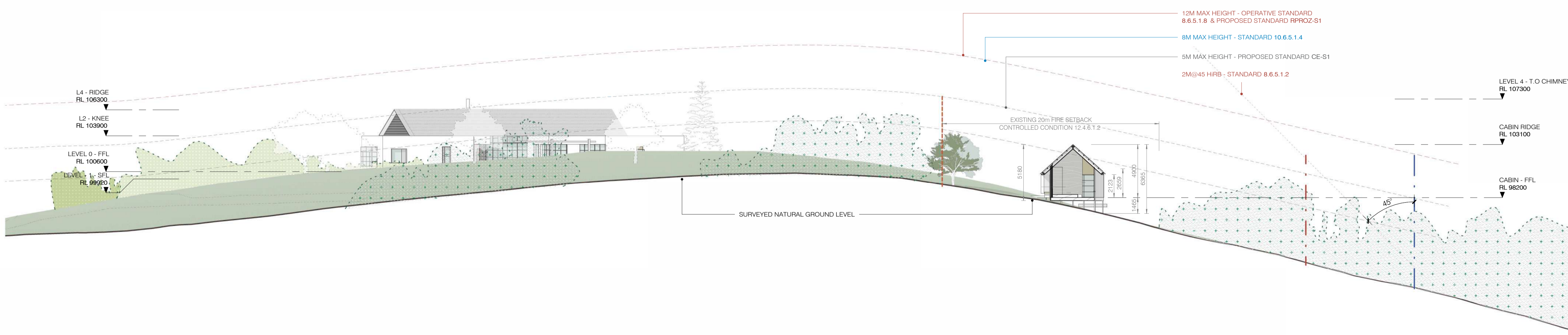
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SECTION NOTES

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- ELEMENT
- SELECTION
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3 SITE CROSS SECTION 03
 0021 1: 200 @ A1 1: 400 @ A3 SECTION VIEW



1 SITE LONG SECTION 03
 0021 1: 200 @ A1 1: 400 @ A3 SECTION VIEW

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Building Name
 SHEET:
SITE - SECTIONS

SCALES @ A1: 1: 200
 REF:
 DRAWN/START DATE:
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RESOURCE CONSENT NOTES

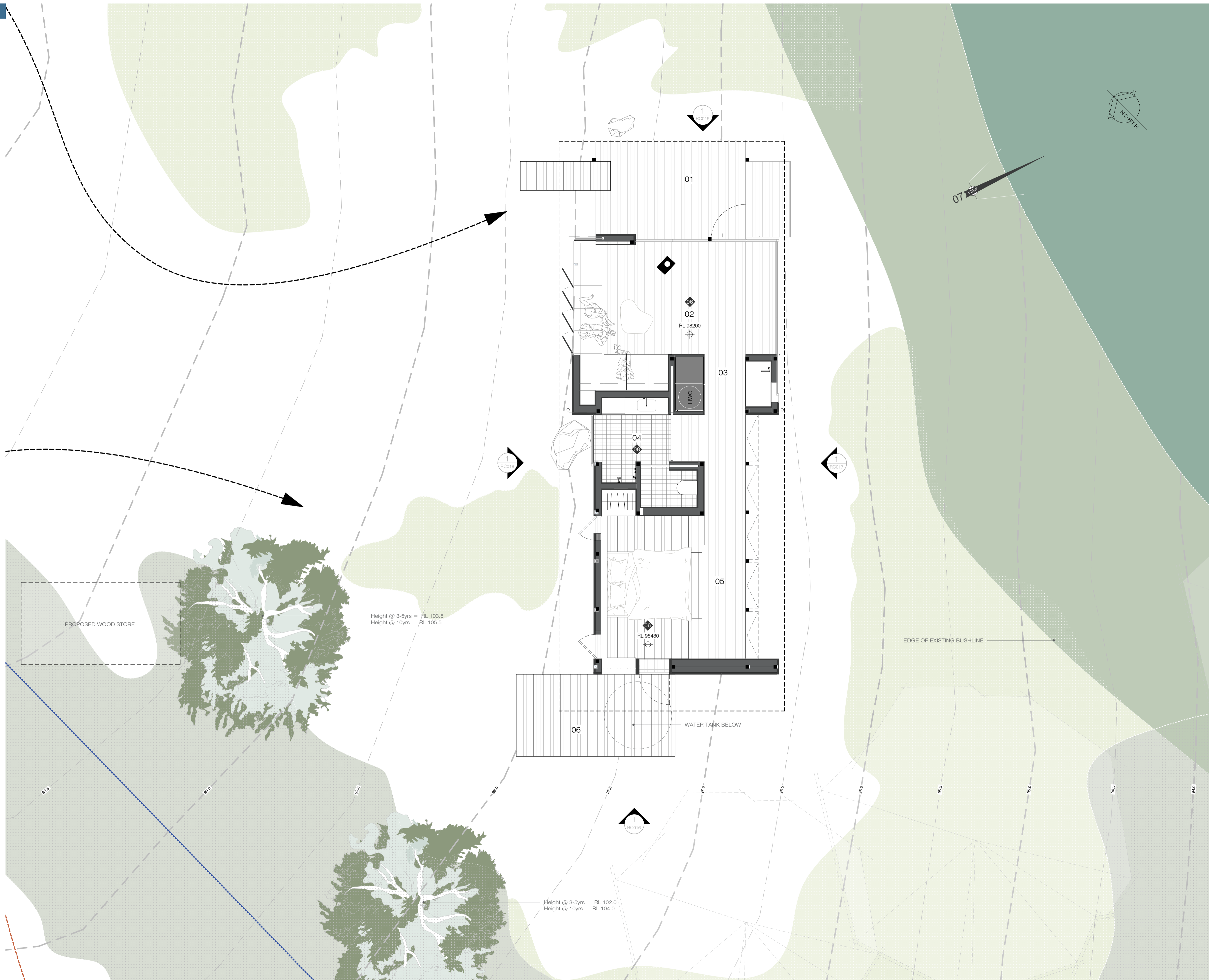
- FOR SITE PLANNING CONTROLS REFER TO APPROVED RESOURCE CONSENT REFERENCE NUMBER

GENERAL KEY

- ELEMENTAL ENCLOSURE KEY:
 -refer elevations/sections
- ELEMENT SELECTION 00-00-00 → CBI CLASS KEYNOTE
- 00 FLOOR TYPE FINISH
 - G01 W01 KEYNOTE / WALL TYPE
 - D1.01 DOOR REFERENCE, REF. DOOR SCHEDULE
 - W1.01 WINDOW REFERENCE, REF. JOINERY SCHEDULE
 - RL 2000 EXISTING SPOT LEVEL
 - RL 2000 NEW SPOT LEVEL
 - SL 2000 SLAB / SUBSTRATE LEVEL
 - FFL+20 FINISHED FLOOR LEVEL (ABOVE SLAB)
 - SP STRUCTURAL POST
 - DP DOWNPIPE
 - ST PLUMBING STACK
 - VP PLUMBING VENT PIPE
 - HT HOSE TAP
 - ORG OVERFLOW RELIEF GULLY
 - TV TERMINAL VENT
 - CD CHANNEL DRAIN
 - DW DISHWASHER
 - HWC HOT WATER CYLINDER
 - SK SINK
 - WC TOILET
 - WHB WASH HAND BASIN

ROOM KEY

- 01 ENTRANCE PORCH
- 02 LIVING ROOM
- 03 KITCHENETTE
- 04 ENSUITE
- 05 BEDROOM
- 06 BEDROOM PORCH



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FLOOR PLAN NOTES

- ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC.
- READ DRAWINGS IN CONJUNCTION WITH DRAWINGS AND SPECIFICATIONS FROM THE ARCHITECT, STRUCTURAL, HYDRAULIC, MECHANICAL, FIRE, ACOUSTIC, THERMAL & FIRE PROTECTION CONSULTANTS.
- REFER TO RELEVANT ARCHITECTURAL PLANS FOR SET-OUTS & SPECIFIC COMPLIANCE NOTES
- SITE IS REGARDED AS SEASPRAY ZONE; THEREFORE ALL MATERIALS AND BUILDING ELEMENTS DURABILITY SHOULD PERFORM ADEQUATELY TO COMPLY WITH B2 OF THE NZBC AND SECTION 4 NZS 3604:2011.
- ALL DOWNPIPE & GUTTER SIZES TO COMPLY WITH NZBC E1 AS1.
- ALL MEMBRANE ROOFS & DECKS ABOVE 40mm SHALL HAVE PROPRIETARY VENTS, INSTALLED TO MANUFACTURERS SPECIFICATIONS. LOCATIONS TO BE DETERMINED ON SITE BY ARCHITECT
- DO NOT SCALE OF DRAWINGS. CONFIRM SIZE & SCALE OF DRAWING INFORMATION WITH ARCHITECT PRIOR TO ORDERING MATERIALS OR COMMENCING CONSTRUCTION

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PROJECT: No. 202336

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Building Name
 SHEET:
CABIN FLOOR PLAN

SCALES @ A1: 1 : 50

REF:
 DRAWN/START DATE:
 DRWG No: REVISION:

RC013 **A**

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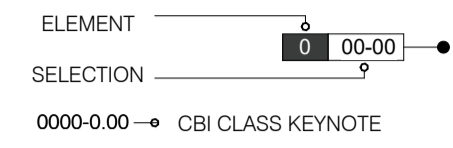
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RESOURCE CONSENT NOTES

1. FOR SITE PLANNING CONTROLS REFER TO APPROVED RESOURCE CONSENT REFERENCE NUMBER

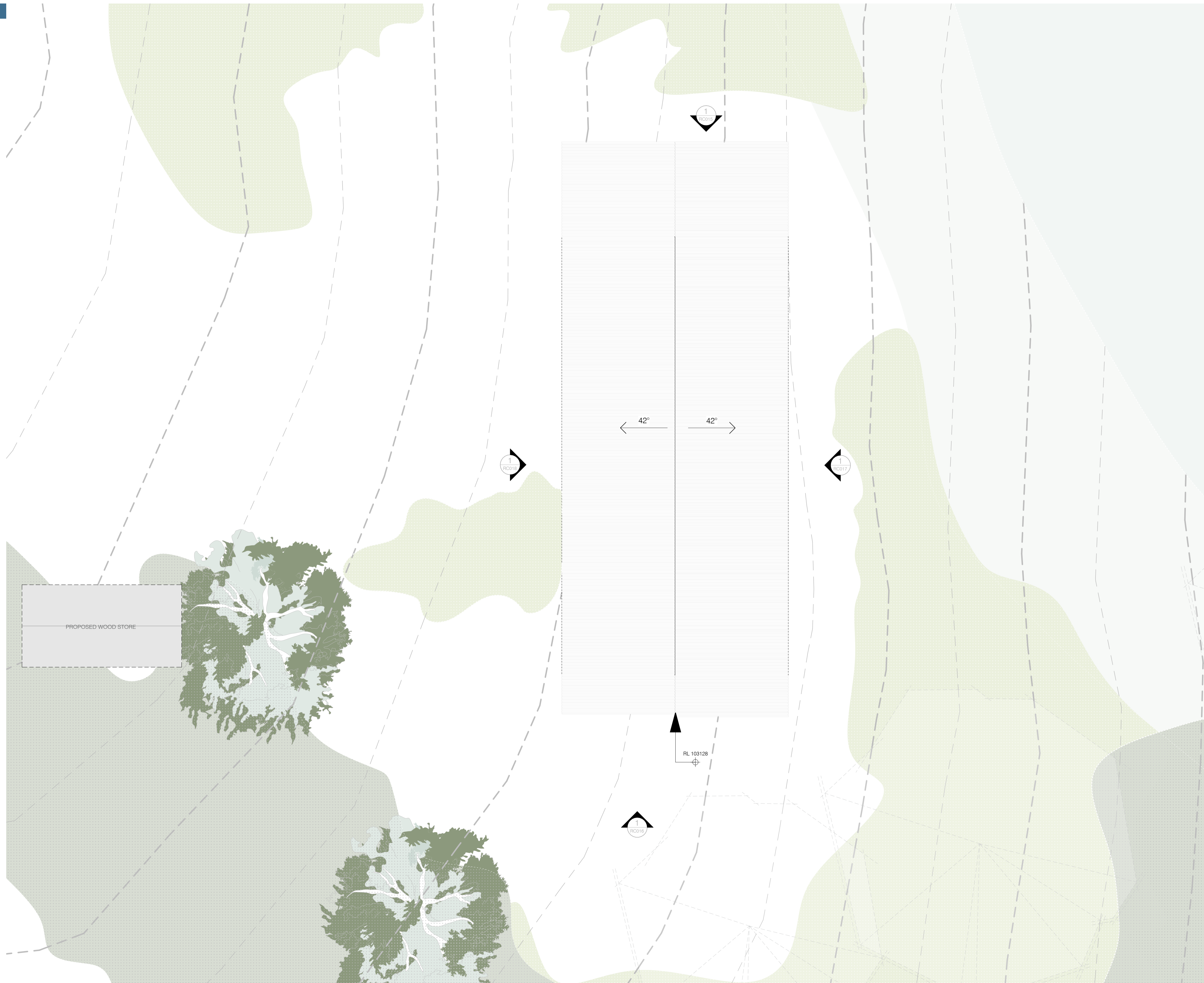
GENERAL KEY

ELEMENTAL ENCLOSURE KEY:
-refer elevations/sections



0000-0.00 → CBI CLASS KEYNOTE

- 00 FLOOR TYPE FINISH
- G01 W01 KEYNOTE / WALL TYPE
- D1.01 DOOR REFERENCE, REF. DOOR SCHEDULE
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- DW DISHWASHER
- HWC HOT WATER CYLINDER
- SK SINK
- WC TOILET
- WHB WASH HAND BASIN



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ROOF NOTES

1. ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC.
2. ALL ROOF FLASHINGS AND ROOF FLASHING DETAILS TO COMPLY WITH NZBC E2.
3. ALL ROOF PENETRATIONS AND ROOF PENETRATION DETAILS TO COMPLY WITH NZBC E2.
4. READ DRAWINGS IN CONJUNCTION WITH DRAWINGS AND SPECIFICATIONS FROM THE ARCHITECT, STRUCTURAL, HYDRAULIC, MECHANICAL, FIRE, ACOUSTIC, THERMAL & FIRE PROTECTION CONSULTANTS.
5. ALL FITTINGS TO BE OF GOOD QUALITY FOR PURPOSE.
6. ALL DP & GUTTER SIZES TO COMPLY WITH NZBC E1.

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DP 323083
Rangihoua Road, Kerikeri 0294

Building Name
SHEET:
CABIN ROOF PLAN

SCALES @ A1: 1 : 50
REF:
DRAWN/START DATE:

DRWG No: **RC014** REVISION: **A**

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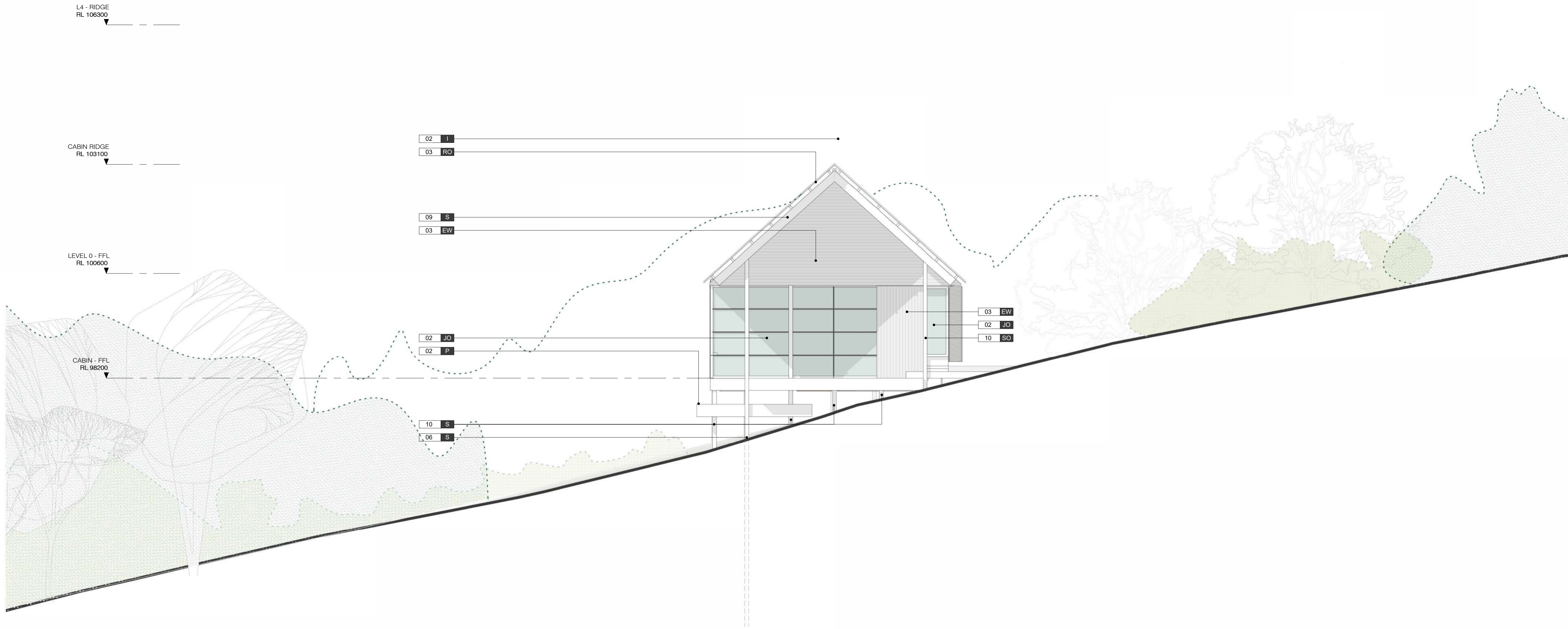
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ELEVATION NOTES

ELEMENTAL ENCLOSURE KEY:
 refer elevations/sections
 ELEMENT 1
 SELECTION 0 00-00 9

0000-0.00 -> CBI CLASS KEYNOTE

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CONCISE ENCLOSURE - ELEMENTAL KEY

| | | | | | |
|--|--|--|--|---|--|
| <p>SO 06 -> STRUCTURE 06 - PRIMARY FOUNDATIONS (VG)</p> <p>2322-4.1.1 500mm Dia reinforced concrete foundation piles bored to min 1.5m into rock mass, allow for steel cages, vertical laps and spacer wheels - refer to structural engineers details</p> <p>3821-4.6.10 140x140mm Purpleheart timber post, primary grade dressed 4 sides 'A Finish' (Sanded) with cast in place steel baseplates, dark stain finish TBC - refer to structural engineers design</p> | <p>SO 10 -> STRUCTURE 10 - STRUCTURAL FLOOR FRAMING (Enclosed)</p> <p>2322-4.1.1 500mm Dia reinforced concrete foundation piles bored to min 1.5m into rock mass, allow for steel cages, vertical laps and spacer wheels - refer to structural engineers details</p> <p>3821-4.6.10 140x140mm H3.2 SG8 timber pile with cast in place steel baseplates, dark stain finish TBC - refer to structural engineers design</p> <p>3821-4.4 90x90mm H3.2 SG8 timber brace with S/S bolted connections, dark stain finish TBC - refer to structural engineers design</p> <p>3821-4.4.12 2/190x45mm H1.2 SG8 timber rafter @ post crs, blocking at 600crs - to engineers design</p> <p>4711T-4.3.1 140mm Terra Lana drop in floor thermal pads R3.2 wool semi-rigid wall insulation (400crs)</p> | <p>RO 03 -> ROOF TYPE 03 - CORRUGATE METAL (Minor)</p> <p>4311RI-4.1.1 Roofing Industries 'True Oak Deep' 0.55 mm BMT with 'Ambro Euromax' Schist coloured corrugated steel profile, fixed as per manufacturers specifications.</p> <p>4161PC1-4.1.1 SOLITEX® Mento 3000 weather resistive roofing barrier</p> <p>RW 03 -> RAINWATER TYPE 03 - TYPICAL METAL ROOF GUTTER (Minor)</p> <p>7411-4.1.2 100mm DIA. 0.55 BMT Roofing Industries roll formed half round copper gutter, laid to min 1:500 fall to outlets - allow for custom brass brackets</p> <p>7411-4.2.1 85mm DIA. 0.55 BMT Copper downpipes with custom brass brackets to match gutter</p> | <p>J 01 -> JOINERY 01 - EXTERIOR TIMBER SLIDERS</p> <p>4511-4.6.1 Iroko hardwood timber sliding doors with Brio 'Timberroll 300N' bottom rolling door hardware, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> <p>J 02 -> JOINERY 02 - EXTERIOR TIMBER CASEMENT & FIXED</p> <p>4511-4.7.1 Iroko hardwood timber fixed glazing & side hung casement windows with Schegel four-bar S/S friction stays, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> <p>J 06 -> JOINERY 06 - EXTERIOR APL ALUMINIUM</p> <p>4521AC-4.1 APL 40mm Commercial series fixed window suite with square glazing beads throughout - Interpon D2525 Flat Matt powder coated finish - Medium Bronze Pearl Y23NA (Refer Spec)</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> <p>5151-4.2.1 Iroko timber square edge jamb liner with concealed fixings & PolyX-Oil finish & concealed fixings - [refer spec]</p> | <p>C 07 -> CEILING 07 - PLY - RAKING (INT)</p> <p>5122PL-4.1.2 15mm Plytech Armourpanel blackbutt CD grade with V-grooves, sanded & prefinished with Osmo Poly-X oil, adhesive fix with Sikabond T55J</p> <p>C 08 -> CEILING 08 - PLY - RAKING (EXT)</p> <p>5122PL-4.1.1 15mm Plytech Armourpanel blackbutt CD grade, sanded & prefinished with Osmo Poly-X oil (dark stain) - pin & adhesive fix with Sikabond T55J</p> <p>3821-4.5.3.1 20x45mm H1.2 SG8 Continuous structural castellated cavity battens with Spax Hi.FORCE 6x140mm delta seal washer head screw fixings</p> <p>4161PC2S4.2.2 Proclima® Solitex® Exatasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings</p> <p>NZS4223.</p> | <p>FI 06 -> FLOOR TYPE 06 - INTERIOR SOLID TIMBER T&G (Minor)</p> <p>6311-4.3.1 Select Solid 90x19mm T&G Spotted Gum Hardwood flooring, distressed & prefinished with OSMO hard wax oil and secret fixed/glued</p> <p>5433E-4.2.3 1 Layer/19mm Ecoply F8 structural square edge plywood floor substrate (H3.2 CCA CD grade), adhesive fix with Sikabond T55J - [refer spec]</p> <p>FI 07 -> FLOOR TYPE 07 - EXTERIOR SOLID TIMBER DECKING (Minor)</p> <p>6311-4.3.1 Select Solid 90x19mm Spotted Gum hardwood decking, distressed & prefinished with OSMO hard wax oil and screw fixings</p> <p>FI 08 -> FLOOR TYPE 08 - INTERIOR TILED 02 (Minor)</p> <p>6221M-4.3.1 8mm Material Space Aarute - Azuchi unglazed, 95x95mm square</p> <p>6221M-4.8.1 Mapei Kerabond Plus and additive isolastic exterior paving adhesive</p> <p>6221M-4.10.1 Mapei Mapelastac Aquardefense waterproofing membrane system</p> <p>6221M-4.5.1 Mapecem screed laid to fall - [refer spec]</p> <p>5111CS-4.2.1 Cemintel Cemiseal 20mm fibre cement floorboard sealed to receive tile finish - [refer spec]</p> <p>I 01 -> FIREPLACE & CHIMNEY - INTERIOR FIREPLACE (Minor)</p> <p>4511-4.6.1 Warmington studio compact 'pedestal' fireplace, with min 225mm dia S/S flue kit & custom directional bird cawling</p> |
|--|--|--|--|---|--|

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 PROJECT: No: 202336
MATAKA STATION
 Lot 4 Mataka Station
 DP 323083
 Rangihoua Road, Kerikeri 0294

Building Name
 SHEET:

ELEVATION - MINOR NORTH

SCALES @ A1: 1:50
 REF:
 DRAWN/START DATE:
 DRWG No: RC015
 REVISION: A

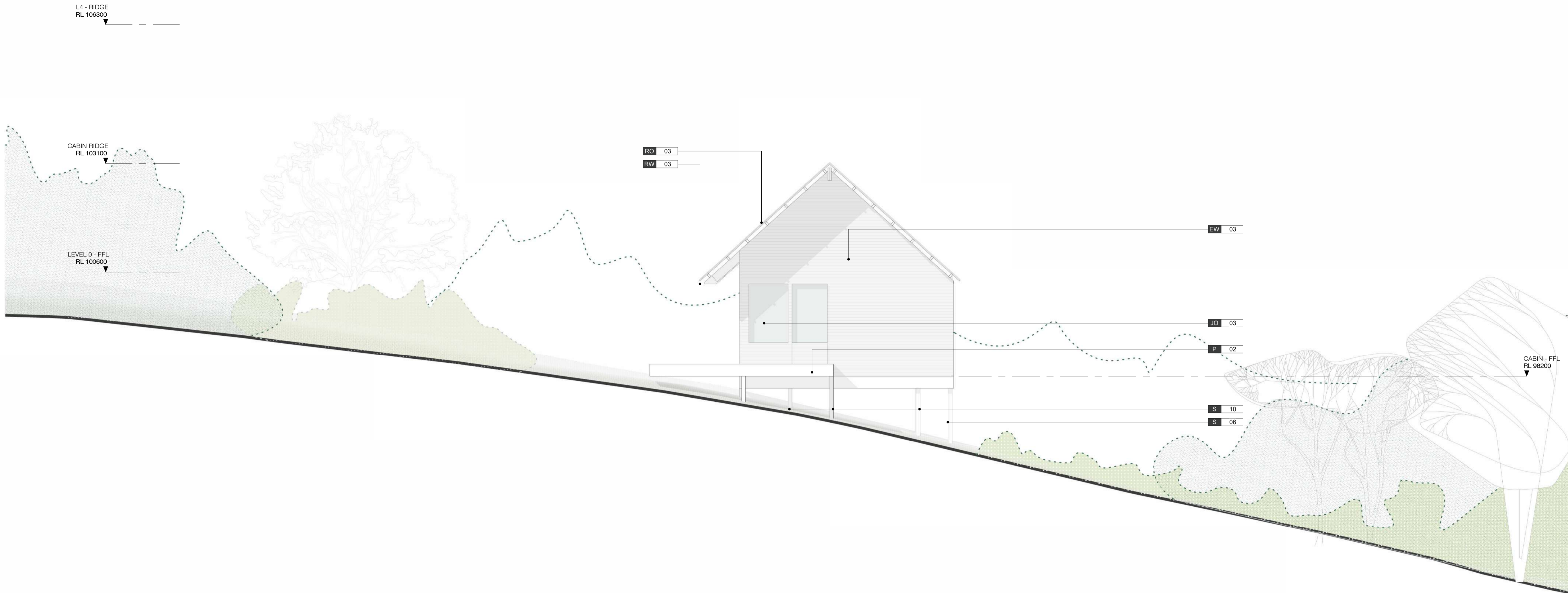
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 ELEMENT 1
 SELECTION 0 00-00 9

0000-0.00 -> CBI CLASS KEYNOTE

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CONCISE ENCLOSURE - ELEMENTAL KEY

| | | | | | |
|--|---|--|---|---|--|
| <p>SO 06 -> STRUCTURE 06 - PRIMARY FOUNDATIONS (VG)</p> <p>2322-4.1.1 500mm Dia reinforced concrete foundation piles bored to min 1.5m into rock mass, allow for steel cages, vertical laps and spacer wheels - refer to structural engineers details</p> <p>3821-4.6.10 140x140mm Purpleheart timber post, primary grade dressed 4 sides A Finish (Sanded) with cast in place steel baseplates, dark stain finish TBC - refer to structural engineers design</p> | <p>SO 10 -> STRUCTURE 10 - STRUCTURAL FLOOR FRAMING (Enclosed)</p> <p>2322-4.1.1 500mm Dia reinforced concrete foundation piles bored to min 1.5m into rock mass, allow for steel cages, vertical laps and spacer wheels - refer to structural engineers details</p> <p>3821-4.6.10 140x140mm H3.2 SG8 timber pile with cast in place steel baseplates, dark stain finish TBC - refer to structural engineers design</p> <p>3821-4.4 90x90mm H3.2 SG8 timber brace with S/S bolted connections, dark stain finish TBC - refer to structural engineers design</p> <p>3821-4.4.12 2/190x45mm H1.2 SG8 timber floor joists @ 400crs, nogs at 600 crs - to engineers design</p> <p>4711T-4.3.1 140mm Terra Lana drop in floor thermal pads R3.2 wool semi-rigid wall insulation (400crs)</p> | <p>RC 03 -> ROOF TYPE 03 - CORRUGATE METAL (Minor)</p> <p>4311RI-4.1.1 Roofing Industries 'True Oak Deep' 0.55 mm BMT with 'Ambro Euromax' Schist coloured corrugated steel profile, fixed as per manufacturers specifications.</p> <p>4161PC1-4.1.1 SOLITEX® Mento 3000 weather resistive roofing barrier</p> <p>RW 03 -> RAINWATER TYPE 03 - TYPICAL METAL ROOF GUTTER (Minor)</p> <p>7411-4.1.2 100mm DIA. 0.55 BMT Roofing Industries roll formed half round copper gutter, laid to min 1:500 fall to outlets - allow for custom brass brackets</p> <p>7411-4.2.1 85mm DIA. 0.55 BMT Copper downpipes with custom brass brackets to match gutter</p> | <p>JO 01 -> JOINERY 01 - EXTERIOR TIMBER SLIDERS</p> <p>4511-4.6.1 Iroko hardwood timber sliding doors with Brio 'Timberroll 300N' bottom rolling door hardware, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> <p>JO 02 -> JOINERY 02 - EXTERIOR TIMBER CASEMENT & FIXED</p> <p>4511-4.7.1 Iroko hardwood timber fixed glazing & side hung casement windows with Schegel four-bar S/S friction stays. Square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> <p>JO 06 -> JOINERY 06 - EXTERIOR APL ALUMINIUM</p> <p>4521AC-4.1 APL 40mm Commercial series fixed window suite with square glazing beads throughout - Interpon D2525 Flat Matt powder coated finish - Medium Bronze Pearl Y23NA (Refer Spec)</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> <p>5151-4.2.1 Iroko timber square edge jamb liner with concealed fixings & PolyX-Oil finish & concealed fixings - [refer spec]</p> | <p>C 07 -> CEILING 07 - PLY - RAKING (INT)</p> <p>5122PL-4.1.2 15mm Plytech Armourpanel blackbutt CD grade with V-grooves, sanded & prefinished with Osmo Poly-X oil, adhesive fix with Sikabond T55J</p> <p>C 08 -> CEILING 08 - PLY - RAKING (EXT)</p> <p>5122PL-4.1.1 15mm Plytech Armourpanel blackbutt CD grade, sanded & prefinished with Osmo Poly-X oil (dark stain) - pin & adhesive fix with Sikabond T55J</p> <p>3821-4.5.3.1 20x45mm H1.2 SG8 Continuous structural castellated cavity battens with Spax Hi.FORCE 6x140mm delta seal washer head screw fixings</p> <p>4161PC2S4.22S Proclima® Solitex® Exatasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings</p> <p>NZS4223.</p> | <p>FI 06 -> FLOOR TYPE 06 - INTERIOR SOLID TIMBER T&G (Minor)</p> <p>6311-4.3.1 Select Solid 90x19mm T&G Spotted Gum Hardwood flooring, distressed & prefinished with OSMO hard wax oil and secret fixed/glued</p> <p>5433E-4.2.3 1 Layer/19mm Ecoply F8 structural square edge plywood floor substrate (H3.2 CCA CD grade), adhesive fix with Sikabond T55J - [refer spec]</p> <p>FI 07 -> FLOOR TYPE 07 - EXTERIOR SOLID TIMBER DECKING (Minor)</p> <p>6311-4.3.1 Select Solid 90x19mm Spotted Gum hardwood decking, distressed & prefinished with OSMO hard wax oil and screw fix</p> <p>FI 08 -> FLOOR TYPE 08 - INTERIOR TILED 02 (Minor)</p> <p>6221M-4.3.1 8mm Material Space Aarute - Azuchi unglazed, 95x95mm square</p> <p>6221M-4.8.1 Mapei Kerabond Plus and additive isolastic exterior paving adhesive</p> <p>6221M-4.10.1 Mapei Mapelastac Aquardefense waterproofing membrane system</p> <p>6221M-4.5.1 Mapecem screed laid to fall - [refer spec]</p> <p>5111CS-4.2.1 Cemintel Cemiseal 20mm fibre cement floorboard sealed to receive tile finish - [refer spec]</p> <p>FI 01 -> FIREPLACE & CHIMNEY - INTERIOR FIREPLACE (Minor)</p> <p>4511-4.6.1 Warmington studio compact 'pedestal' fireplace, with min 225mm dia S/S flue kit & custom directional bird cowl</p> |
| <p>SO 07 -> STRUCTURE 07 - PRIMARY FOUNDATIONS (H3.2)</p> <p>3102-4.7.1 120mm thick 30Mpa reinforced insitu concrete floor slab - [refer to structural engineers drawings]</p> <p>4161T-4.1.1 Thermakraft Thermathene Orange 0.3mm thick damp proof membrane concrete underlay</p> <p>2244-4.2 30mm compacted aggregate sand blinding layer</p> <p>2244-4.1 Min 150mm - 600mm deep compacted hardfill on grade</p> | <p>EW 03 -> EXTERIOR WALL & CLADDING 03 - HORIZONTAL BB WB (minor)</p> <p>4221-4.2.1 90 X 18.5mm Custom splaycut WRC select knot horizontal bevelback weatherboard cladding (BSF & stained), allow for Zone Vanguard fire treatment to group 1 compliance- [refer spec]</p> <p>3821-4.5.1 20x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ min 600crs]</p> <p>4161PC1-4.1.1 Proclima® Solitex® Exatasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings</p> <p>3827E-4.2.3 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade</p> <p>3821-4.1.1 H1.2 SG8 Exterior timber wall framing, refer framing plan for sizing</p> | <td> </td> <td> </td> <td> </td> | | | |
| <p>SO 08 -> STRUCTURE 08 - STRUCTURAL ROOF FRAMING (Rafter Type)</p> <p>3821-4.3.12 90x45mm H1.2 SG8 timber roof purlins @ 600 crs, structurally fixed to rafter framing, nogs at 600crs</p> <p>3821-4.3.6 290x45mm H1.2 SG8 timber ridge beam - to engineers design</p> <p>3821-4.3.4 2/190x45mm H1.2 SG8 timber rafter @ post crs, blocking at 600crs - to engineers design</p> <p>3821-4.3.15 190x45mm H1.2 SG8 timber intermediate purlins between post crs, noggling at 600crs</p> <p>3821-4.3.14 2/190x45mm H1.2 SG8 timber rafter boundary end trimmer - to engineers design</p> | | | | | |
| <p>SO 09 -> STRUCTURE 09 - STRUCTURAL ROOF FRAMING (Purlin Type)</p> <p>3821-4.3.12 90x45mm H1.2 SG8 timber roof purlins @ 600 crs, structurally fixed to rafter framing, nogs at 600crs</p> <p>3821-4.3.6 290x45mm H1.2 SG8 timber ridge beam - to engineers design</p> <p>3821-4.3.4 2/190x45mm H1.2 SG8 timber rafter @ post crs, blocking at 600crs - to engineers design</p> <p>3821-4.3.14 190x45mm H1.2 SG8 timber purlins @ 600crs, blocking at 600crs</p> <p>3821-4.3.14 2/190x45mm H1.2 SG8 timber rafter boundary end trimmer - to engineers design</p> | | | | | |

A RC REVISION HISTORY: 2025_02_27



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www.cheshirearchitects.com
 PROJECT: No: 202336
MATAKA STATION
 Lot 4 Mataka Station
 DP 323083
 Rangihoua Road, Kerikeri 0294

Building Name
 SHEET:

ELEVATION - MINOR SOUTH

SCALES @ A1: 1:50
 REF:
 DRAWN/START DATE:

DRWG No: RC016 REVISION: A

DO NOT SCALE
 CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK
 COPYRIGHT © CHESHIRE ARCHITECTS LIMITED
 27/02/2025 3:03:38 pm

RC SUBMISSION -

ELEVATION NOTES

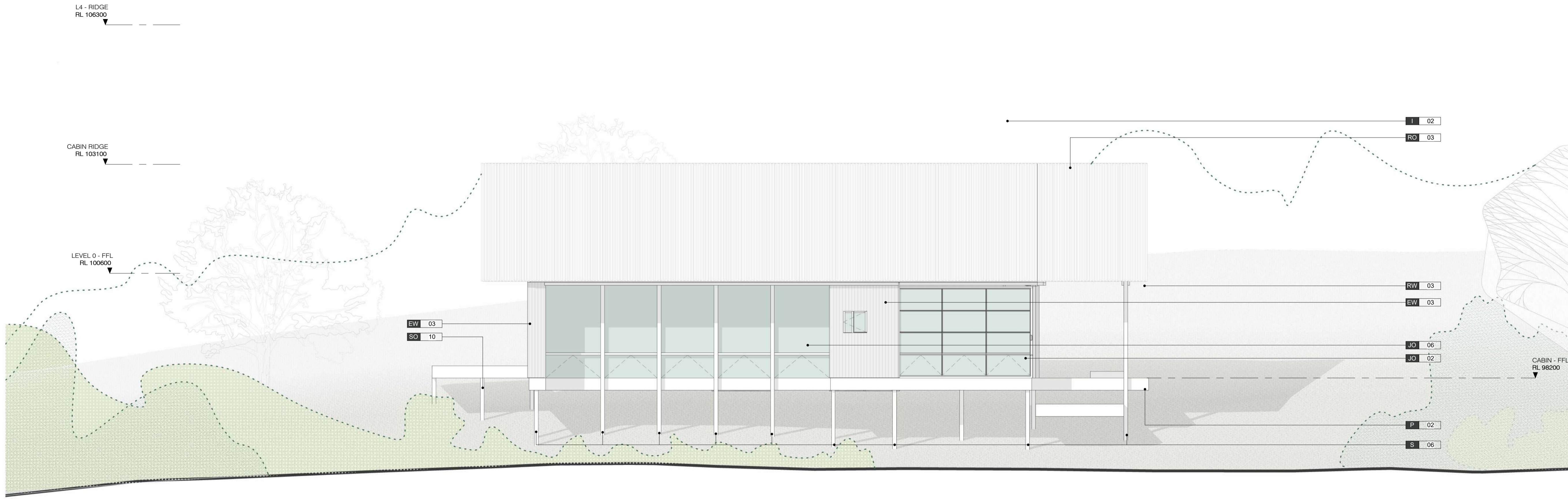
ELEMENTAL ENCLOSURE KEY:
 refer elevations/sections

ELEMENT 1 00-00

SELECTION 9

0000-0.00 → CBI CLASS KEYNOTE

1. ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC.
2. READ DRAWINGS IN CONJUNCTION WITH DRAWINGS AND SPECIFICATIONS FROM THE ARCHITECT, STRUCTURAL, HYDRAULIC, MECHANICAL, FIRE, ACOUSTIC, LANDSCAPE, CIVIL, THERMAL & FIRE PROTECTION CONSULTANTS.
3. ALL MATERIALS DETAILED ARE TO COMPLY WITH THEIR CURRENT MANUFACTURERS SPECIFICATIONS AND ARE TO BE INSTALLED BY A NOMINATED INSTALLER IF REQUIRED.
4. ALL DOCUMENTED SPECIFICATIONS TO BE CROSS CHECKED AGAINST CONTRACT SPECIFICATIONS PRIOR TO ANY WORK COMMENCING.



CONCISE ENCLOSURE - ELEMENTAL KEY

| | | | | | |
|---|--|---|---|---|--|
| <p>SO 06 → STRUCTURE 06 - PRIMARY FOUNDATIONS (VG)</p> <p>2322-4.1.1 500mm Dia reinforced concrete foundation piles bored to min 1.5m into rock mass, allow for steel cages, vertical laps and spacer wheels - refer to structural engineers details</p> <p>3821-4.6.10 140x140mm Purpleheart timber post, primary grade dressed 4 sides A Finish (Sanded) with cast in place steel baseplates, dark stain finish TBC - refer to structural engineers design</p> | <p>SO 10 → STRUCTURE 10 - STRUCTURAL FLOOR FRAMING (Enclosed)</p> <p>2322-4.1.1 500mm Dia reinforced concrete foundation piles bored to min 1.5m into rock mass, allow for steel cages, vertical laps and spacer wheels - refer to structural engineers details</p> <p>3821-4.6.10 140x140mm H3.2 SG8 timber pile with cast in place steel baseplates, dark stain finish TBC - refer to structural engineers design</p> <p>3821-4.4 90x90mm H3.2 SG8 timber brace with S/S bolted connections, dark stain finish TBC - refer to structural engineers design</p> <p>3821-4.4.12 2/190x45mm H1.2 SG8 timber joist boundary end trimmer with S/S bolted connections to posts - to engineers design</p> <p>4711T-4.3.1 140mm Terra Lana drop in floor thermal pads R3.2 wool semi-rigid wall insulation (400crs)</p> | <p>RO 03 → ROOF TYPE 03 - CORRUGATE METAL (Minor)</p> <p>4311RI-4.1.1 Roofing Industries 'True Oak Deep' 0.55 mm BMT with 'Ambro Euromax' Schist coloured corrugated steel profile, fixed as per manufacturers specifications.</p> <p>4161PC1-4.1.1 SOLITEX® Mento 3000 weather resistive roofing barrier</p> | <p>JO 01 → JOINERY 01 - EXTERIOR TIMBER SLIDERS</p> <p>4511-4.6.1 Iroko hardwood timber sliding doors with Brio 'Timberroll 300N' bottom rolling door hardware, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> | <p>CE 07 → CEILING 07 - PLY - RAKING (INT)</p> <p>5122PL-4.1.2 15mm Plytech Armourpanel blackbutt CD grade with V-grooves, sanded & prefinished with Osmo Poly-X oil, adhesive fix with Sikabond T55J</p> | <p>FI 06 → FLOOR TYPE 06 - INTERIOR SOLID TIMBER T&G (Minor)</p> <p>6311-4.3.1 Select Solid 90x19mm T&G Spotted Gum Hardwood flooring, distressed & prefinished with OSMO hard wax oil and secret fixed/glued</p> <p>5433E-4.2.3 1 Layer/19mm Ecoply F8 structural square edge plywood floor subslat (H3.2 CCA CD grade), adhesive fix with Sikabond T55J - [refer spec]</p> |
| <p>SO 07 → STRUCTURE 07 - PRIMARY FOUNDATIONS (H3.2)</p> <p>3102-4.7.1 120mm thick 30Mpa reinforced insitu concrete floor slab - [refer to structural engineers drawings]</p> <p>4161T-4.1.1 Thermakraft Thermathene Orange 0.3mm thick damp proof membrane concrete underlay</p> <p>2244-4.2 30mm compacted aggregate sand blinding layer</p> <p>2244-4.1 Min 150mm - 600mm deep compacted hardfill on grade</p> | <p>EW 03 → EXTERIOR WALL & CLADDING 03 - HORIZONTAL BB WB (minor)</p> <p>4221-4.2.1 90 X 18.5mm Custom splaycut WRC select knot horizontal bevelback weatherboard cladding (BSF & stained), allow for Zone Vanguard fire treatment to group 1 compliance- [refer spec]</p> <p>3821-4.5.1 20x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ min 600crs]</p> <p>4161PC1-4.1.1 Proclima® Solitex® Exatasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings</p> <p>3827E-4.2.3 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade</p> <p>3821-4.1.1 H1.2 SG8 Exterior timber wall framing, refer framing plan for sizing</p> | <p>RW 03 → RAINWATER TYPE 03 - TYPICAL METAL ROOF GUTTER (Minor)</p> <p>7411-4.1.2 100mm DIA. 0.55 BMT Roofing Industries roll formed half round copper gutter, laid to min 1:500 fall to outlets - allow for custom brass brackets</p> <p>7411-4.2.1 85mm DIA. 0.55 BMT Copper downpipes with custom brass brackets to match gutter</p> | <p>JO 02 → JOINERY 02 - EXTERIOR TIMBER CASEMENT & FIXED</p> <p>4511-4.7.1 Iroko hardwood timber fixed glazing & side hung casement windows with Schegel four-bar S/S friction stays, Square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> | <p>CE 08 → CEILING 08 - PLY - RAKING (EXT)</p> <p>5122PL-4.1.1 15mm Plytech Armourpanel blackbutt CD grade, sanded & prefinished with Osmo Poly-X oil (dark stain) - pin & adhesive fix with Sikabond T55J</p> <p>3821-4.5.3.1 20x45mm H1.2 SG8 Continuous structural castellated cavity battens with Spax HI.FORCE 6x140mm delta seal washer head screw fixings</p> <p>4161PC2S4.2.2 Proclima® Solitex® Exatasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings</p> | <p>FI 07 → FLOOR TYPE 07 - EXTERIOR SOLID TIMBER DECKING (Minor)</p> <p>6311-4.3.1 Select Solid 90x19mm Spotted Gum hardwood decking, distressed & prefinished with OSMO hard wax oil and screw fix</p> |
| <p>SO 08 → STRUCTURE 08 - STRUCTURAL ROOF FRAMING (Rafter Type)</p> <p>3821-4.3.1.2 90x45mm H1.2 SG8 timber roof purlins @ 600 crs, structurally fixed to rafter framing, noqs at 600crs</p> <p>3821-4.3.6 290x45mm H1.2 SG8 timber ridge beam - to engineers design</p> <p>3821-4.3.4 2/190x45mm H1.2 SG8 timber rafter @ post crs, blocking at 600crs - to engineers design</p> <p>3821-4.3.15 190x45mm H1.2 SG8 timber intermediate purlins between post crs, noggling at 600crs</p> <p>3821-4.3.14 2/190x45mm H1.2 SG8 timber rafter boundary end trimmer - to engineers design</p> | <p>EW 03 → EXTERIOR WALL & CLADDING 03 - HORIZONTAL BB WB (minor)</p> <p>4221-4.2.1 90 X 18.5mm Custom splaycut WRC select knot horizontal bevelback weatherboard cladding (BSF & stained), allow for Zone Vanguard fire treatment to group 1 compliance- [refer spec]</p> <p>3821-4.5.1 20x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ min 600crs]</p> <p>4161PC1-4.1.1 Proclima® Solitex® Exatasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings</p> <p>3827E-4.2.3 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade</p> <p>3821-4.1.1 H1.2 SG8 Exterior timber wall framing, refer framing plan for sizing</p> | <p>JO 06 → JOINERY 06 - EXTERIOR APL ALUMINIUM</p> <p>4521AC-4.1 APL 40mm Commercial series fixed window suite with square glazing beads throughout - Interpon D2525 Flat Matt powder coated finish - Medium Bronze Pearl Y23NA [Refer Spec]</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> <p>5151-4.2.1 Iroko timber square edge jamb liner with concealed fixings & PolyX-Oil finish & concealed fixings - [refer spec]</p> | <p>CE 08 → CEILING 08 - PLY - RAKING (EXT)</p> <p>5122PL-4.1.1 15mm Plytech Armourpanel blackbutt CD grade, sanded & prefinished with Osmo Poly-X oil (dark stain) - pin & adhesive fix with Sikabond T55J</p> <p>3821-4.5.3.1 20x45mm H1.2 SG8 Continuous structural castellated cavity battens with Spax HI.FORCE 6x140mm delta seal washer head screw fixings</p> <p>4161PC2S4.2.2 Proclima® Solitex® Exatasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings</p> | <p>FI 08 → FLOOR TYPE 08 - INTERIOR TILED 02 (Minor)</p> <p>6221M-4.3.1 8mm Material Space Aarute - Azuchi unglazed, 95x95mm square</p> <p>6221M-4.8.1 Mapei Kerabond Plus and additive isolastic exterior paving adhesive</p> <p>6221M-4.10.1 Mapei Mapelastac Aquardefense waterproofing membrane system</p> <p>6221M-4.5.1 Mapecem screed laid to fall - [refer spec]</p> <p>5111CS-4.2.1 Cemintel Cemiseal 20mm fibre cement floorboard sealed to receive tile finish - [refer spec]</p> | <p>FI 01 → FIREPLACE & CHIMNEY - INTERIOR FIREPLACE (Minor)</p> <p>4511-4.6.1 Warmington studio compact 'pedestal' fireplace, with min 225mm dia S/S flue kit & custom directional bird cowl</p> |
| <p>SO 09 → STRUCTURE 09 - STRUCTURAL ROOF FRAMING (Purlin Type)</p> <p>3821-4.3.1.2 90x45mm H1.2 SG8 timber roof purlins @ 600 crs, structurally fixed to rafter framing, noqs at 600crs</p> <p>3821-4.3.6 290x45mm H1.2 SG8 timber ridge beam - to engineers design</p> <p>3821-4.3.4 2/190x45mm H1.2 SG8 timber rafter @ post crs, blocking at 600crs - to engineers design</p> <p>3821-4.3.14 190x45mm H1.2 SG8 timber purlins @ 600crs, blocking at 600crs</p> <p>3821-4.3.14 2/190x45mm H1.2 SG8 timber rafter boundary end trimmer - to engineers design</p> | <p>EW 03 → EXTERIOR WALL & CLADDING 03 - HORIZONTAL BB WB (minor)</p> <p>4221-4.2.1 90 X 18.5mm Custom splaycut WRC select knot horizontal bevelback weatherboard cladding (BSF & stained), allow for Zone Vanguard fire treatment to group 1 compliance- [refer spec]</p> <p>3821-4.5.1 20x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ min 600crs]</p> <p>4161PC1-4.1.1 Proclima® Solitex® Exatasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings</p> <p>3827E-4.2.3 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade</p> <p>3821-4.1.1 H1.2 SG8 Exterior timber wall framing, refer framing plan for sizing</p> | <p>JO 06 → JOINERY 06 - EXTERIOR APL ALUMINIUM</p> <p>4521AC-4.1 APL 40mm Commercial series fixed window suite with square glazing beads throughout - Interpon D2525 Flat Matt powder coated finish - Medium Bronze Pearl Y23NA [Refer Spec]</p> <p>4610AG-4.3.2 Clear 26mm AGP Low-E IGU's to comply with</p> <p>5151-4.2.1 Iroko timber square edge jamb liner with concealed fixings & PolyX-Oil finish & concealed fixings - [refer spec]</p> | <p>CE 07 → CEILING 07 - PLY - RAKING (INT)</p> <p>5122PL-4.1.2 15mm Plytech Armourpanel blackbutt CD grade with V-grooves, sanded & prefinished with Osmo Poly-X oil, adhesive fix with Sikabond T55J</p> | <p>FI 06 → FLOOR TYPE 06 - INTERIOR SOLID TIMBER T&G (Minor)</p> <p>6311-4.3.1 Select Solid 90x19mm T&G Spotted Gum Hardwood flooring, distressed & prefinished with OSMO hard wax oil and secret fixed/glued</p> <p>5433E-4.2.3 1 Layer/19mm Ecoply F8 structural square edge plywood floor subslat (H3.2 CCA CD grade), adhesive fix with Sikabond T55J - [refer spec]</p> | <p>FI 07 → FLOOR TYPE 07 - EXTERIOR SOLID TIMBER DECKING (Minor)</p> <p>6311-4.3.1 Select Solid 90x19mm Spotted Gum hardwood decking, distressed & prefinished with OSMO hard wax oil and screw fix</p> |

A RC 2025_02_27
 REVISION HISTORY:



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 Auckland
 New Zealand
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 FX +64 9 358 2771

www.cheshirearchitects.com
 PROJECT: No: 202336
MATAKA STATION
 Lot 4 Mataka Station
 DP 323083
 Rangihoua Road, Kerikeri 0294

Building Name
 SHEET:

ELEVATION - MINOR EAST

SCALES @ A1: 1:50
 REF:
 DRAWN/START DATE:
 DRWG No: REVISION:
RC017 A

DO NOT SCALE
 CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK
 COPYRIGHT © CHESHIRE ARCHITECTS LIMITED
 27/02/2025 3:04:07 pm

ELEVATION NOTES

ELEMENTAL ENCLOSURE KEY:
 refer elevations/sections
 ELEMENT 9
 SELECTION 9

0000-0-00 -> CBI CLASS KEYNOTE

1. ALL WORKS TO COMPLY WITH RELEVANT CLAUSES OF THE NZBC.
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CONCISE ENCLOSURE - ELEMENTAL KEY

| SO 06 | STRUCTURE 06 - PRIMARY FOUNDATIONS (VG) | SO 10 | STRUCTURE 10 - STRUCTURAL FLOOR FRAMING (Enclosed) | RO 03 | ROOF TYPE 03 - CORRUGATE METAL (Minor) | JO 01 | JOINERY 01 - EXTERIOR TIMBER SLIDERS | CE 07 | CEILING 07 - PLY - RAKING (INT) | FI 06 | FLOOR TYPE 06 - INTERIOR SOLID TIMBER T&G (Minor) |
|-------------|--|-------------|--|---------------|--|--------------|--|--------------|---|--------------|---|
| 2322-4.1.1 | 500mm Dia reinforced concrete foundation piles bored to min 1.5m into rock mass, allow for steel cages, vertical laps and spacer wheels - refer to structural engineers details | 2322-4.1.1 | 500mm Dia reinforced concrete foundation piles bored to min 1.5m into rock mass, allow for steel cages, vertical laps and spacer wheels - refer to structural engineers details | 4311RI-4.1.1 | Roofing Industries 'True Oak Deep' 0.55 mm BMT with 'Ambro Euromax' Schist coloured corrugated steel profile, fixed as per manufacturers specifications. | 4511-4.6.1 | Iroko hardwood timber sliding doors with Brio 'Timberroll 300N' bottom rolling door hardware, square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes | 5122PL-4.1.2 | 15mm Plytech Armourpanel blackbutt CD grade with V-grooves, sanded & prefinished with Osmo Poly-X oil, adhesive fix with Sikabond T55J | 6311-4.3.1 | Select Solid 90x19mm T&G Spotted Gum Hardwood flooring, distressed & prefinished with OSMO hard wax oil and secret fixed/glued |
| 3821-4.6.10 | 140x140mm Purpleheart timber post, primary grade dressed 4 sides 'A Finish' (Sanded) with cast in place steel baseplates, dark stain finish TBC - refer to structural engineers design | 3821-4.6.10 | 140x140mm H3.2 SG8 timber pile with cast in place steel baseplates, dark stain finish TBC - refer to structural engineers design | 4161PC1-4.1.1 | SOLITEX® Mento 3000 weather resistive roofing barrier | 4610AG-4.3.2 | Clear 26mm AGP Low-E IGU's to comply with | CE 08 | CEILING 08 - PLY - RAKING (EXT) | 5433E-4.2.3 | 1 Layer/19mm Ecoply F8 structural square edge plywood floor subslat (H3.2 CCA CD grade), adhesive fix with Sikabond T55J - [refer spec] |
| SO 07 | STRUCTURE 07 - PRIMARY FOUNDATIONS (H3.2) | 3821-4.4 | 90x90mm H3.2 SG8 timber brace with S/S bolted connections, dark stain finish TBC - refer to structural engineers design | 7411-4.1.2 | 100mm DIA. 0.55 BMT Roofing Industries roll formed half round copper gutter, laid to min 1:500 fall to outlets - allow for custom brass brackets | 4511-4.7.1 | Iroko hardwood timber fixed glazing & side hung casement windows with Schegel four-bar S/S friction stays. Square glazing beads throughout with adhesive fixed solid timber Iroko beading to grid window panes | 5122PL-4.1.1 | 15mm Plytech Armourpanel blackbutt CD grade, sanded & prefinished with Osmo Poly-X oil (dark stain) - pin & adhesive fix with Sikabond T55J | FI 07 | FLOOR TYPE 07 - EXTERIOR SOLID TIMBER DECKING (Minor) |
| 3102-4.7.1 | 120mm thick 30Mpa reinforced insitu concrete floor slab - [refer to structural engineers drawings] | 3821-4.4.12 | 2190x45mm H1.2 SG8 timber joist boundary end trimmer with S/S bolted connections to posts - to engineers design | 7411-4.2.1 | 85mm DIA. 0.55 BMT Copper downpipes with custom brass brackets to match gutter | 4610AG-4.3.2 | Clear 26mm AGP Low-E IGU's to comply with | 3821-4.5.3.1 | 20x45mm H1.2 SG8 Continuous structural castellated cavity battens with Spax HI.FORCE 6x140mm delta seal washer head screw fixings | 6311-4.3.1 | Select Solid 90x19mm Spotted Gum hardwood decking, distressed & prefinished with OSMO hard wax oil and screw fix |
| 4161T-4.1.1 | Thermakraft Thermathene Orange 0.3mm thick damp proof membrane concrete underlay | 4711T-4.3.1 | 140mm Terra Lana drop in floor thermal pads R3.2 wool semi-rigid wall insulation (400crs) | 4161PC1-4.1.1 | Proclima® Solitex® Extasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings | 4521AC-4.1 | APL 40mm Commercial series fixed window suite with square glazing beads throughout - Interpon D2525 Flat Matt powder coated finish - Medium Bronze Pearl Y23NA [Refer Spec] | CE 08 | CEILING 08 - PLY - RAKING (EXT) | FI 08 | FLOOR TYPE 08 - INTERIOR TILED 02 (Minor) |
| 2244-4.2 | 30mm compacted aggregate sand blinding layer | 4221-4.2.1 | 90 X 18.5mm Custom splaycut WRC select knot horizontal bevelback weatherboard cladding (BSF & stained), allow for Zone Vanguard fire treatment to group 1 compliance- [refer spec] | 3821-4.5.1 | 20x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ min 600crs] | 4610AG-4.3.2 | Clear 26mm AGP Low-E IGU's to comply with | NZS4223. | | 6221M-4.3.1 | 8mm Material Space Aarute - Azuchi unglazed, 95x95mm square |
| 2244-4.1 | Min 150mm - 600mm deep compacted hardfill on grade | 3821-4.5.1 | 20x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ min 600crs] | 4161PC1-4.1.1 | Proclima® Solitex® Extasana breathable wall protection membrane with Tescon Extora & Extoseal flashing tape to joints & openings | 5151-4.2.1 | Iroko timber square edge jamb liner with concealed fixings & PolyX-Oil finish & concealed fixings - [refer spec] | | | 6221M-4.8.1 | Mapei Kerabond Plus and additive isolastic exterior paving adhesive |
| SO 08 | STRUCTURE 08 - STRUCTURAL ROOF FRAMING (Rafter Type) | 3821-4.5.1 | 20x45mm H3.2 Vertical timber cavity batten - [structurally fixed to framing @ min 600crs] | 3827E-4.2.3 | 12mm Ecoply F8 structural square edge plywood wall substrate - H3.2 CCA treated CD grade | | | | | 6221M-4.10.1 | Mapei Mapelastac Aquardense waterproofing membrane system |
| 3821-4.3.12 | 90x45mm H1.2 SG8 timber roof purlins @ 600 crs, structurally fixed to rafter framing, noqs at 600crs | 3821-4.1.1 | H1.2 SG8 Exterior timber wall framing, refer framing plan for sizing | | | | | | | 5111CS-4.2.1 | Mapecem screed laid to fall - [refer spec] |
| 3821-4.3.6 | 290x45mm H1.2 SG8 timber ridge beam - to engineers design | | | | | | | | | | |
| 3821-4.3.4 | 2/190x45mm H1.2 SG8 timber rafter @ post crs, blocking at 600crs - to engineers design | | | | | | | | | | |
| 3821-4.3.15 | 190x45mm H1.2 SG8 timber intermediate purlins between post crs, noggings at 600crs | | | | | | | | | | |
| 3821-4.3.14 | 2/190x45mm H1.2 SG8 timber rafter boundary end trimmer - to engineers design | | | | | | | | | | |
| SO 09 | STRUCTURE 09 - STRUCTURAL ROOF FRAMING (Purlin Type) | | | | | | | | | | |
| 3821-4.3.12 | 90x45mm H1.2 SG8 timber roof purlins @ 600 crs, structurally fixed to rafter framing, noqs at 600crs | | | | | | | | | | |
| 3821-4.3.6 | 290x45mm H1.2 SG8 timber ridge beam - to engineers design | | | | | | | | | | |
| 3821-4.3.4 | 2/190x45mm H1.2 SG8 timber rafter @ post crs, blocking at 600crs - to engineers design | | | | | | | | | | |
| 3821-4.3.14 | 190x45mm H1.2 SG8 timber purlins @ 600crs, blocking at 600crs | | | | | | | | | | |
| 3821-4.3.14 | 2/190x45mm H1.2 SG8 timber rafter boundary end trimmer - to engineers design | | | | | | | | | | |

A RC
 REVISION HISTORY: 2025_02_27

CHESHIRE

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PROJECT: No: 202336
MATAKA STATION
 Lot 4 Mataka Station
 DP 323083
 Rangihoua Road, Kerikeri 0294

Building Name

SHEET:

ELEVATION - MINOR WEST

SCALES @ A1: 1:50

REF:
 DRAWN/START DATE:

DRWG No: RC018 REVISION: A

DO NOT SCALE
 CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK
 COPYRIGHT © CHESHIRE ARCHITECTS LIMITED

27/02/2025 3:04:27 pm

RC SUBMISSION -

MATAKA STATION

CHESHIRE ARCHITECTS

22.01.2025

RESOURCE CONSENT : DEVELOPED DESIGN PACKAGE

LOT 4 - MATAKA STATION, BAY OF ISLANDS

Prepared for Michael Gilson & Joan McPhee

DESIGN STATEMENT

The Site

The incumbent 'house site' encompasses the northeastern extent of Lot 4, Mataka Station. The designated house area occupies the hilltop and adjacent slopes, bound by the north and south boundaries and primary vehicle right of way to the west. The identified house site for Lot 4 is close to the brow of the hill and south of the established hilltop Norfolk pine.

The proposed development site is aligned with the designated building area, with consideration of the hilltop and visibility and buildings are located below the crest of the hill and sited to take advantage of existing mature vegetation to provide visual screening.

The home nestles into the landscape, transecting the Coastal Boundary overlay, and commanding 270° views from Mataka Mountain to the east, across Harakeke Island and up towards Takou Bay, and beyond to the rolling hills & valleys of the west.

The site itself consists predominantly of pastured rural grounds, flanked by an established Norfolk Pine to the east that marks the vertical datum of the hilltop, and a secondary pine adjacent to the access road boundary. A windswept Pohutukawa grove to the northwest providing opportunity for shade and reprieve from the elements. Scatterings of regenerative native flora drape the landscape to the eastern and northern slopes, cascading down towards the foreshore.

Essentially northeast facing, the site receives sun throughout the seasons and siting of the primary dwelling and minor dwelling buildings take advantage of this.

The siting of the buildings allowing the natural features of the landscape to dominate, the placement of proposed building platforms and the incorporation of building materials that are sympathetic to, and blend comfortably with, and into the natural coastal and farmland environment.

Landscape design

A backdrop of native planting to the west & south has been proposed to strengthen the natural enclosure of the site when viewed from the adjacent Lots 21 & 5, the arrival roads, as well as from the coastal edge, assisting in diminishing the impact of the buildings. In accordance with 2.1.2 of the Mataka Design Guideline, specifically the fourth schedule, screening of the development from Lot 21 has been achieved via the use of additional localised native planting to the western most boundaries of the Mataka Station designated house site.

Broadly, the proposed landscape design is a continuation of existing planting patterns with groupings of planting interspersed and located to allow the natural form of the hill to be maintained whilst screening the buildings where required. Existing vegetation is preserved, with new planting and larger tree specimens paired to extend the natural plant patterns across the coastal hillside.

The Primary Dwelling

The 'primary dwelling' is the principal private development providing residential accommodation for the owners Joan Mcphee & Michael Gilson.

The prominence of the site, its visibility and engagement within Mataka Station, adjoining lots and the foreshore, has required careful consideration of the architectural form and the site earthworks that will be required, to ensure minimal impact to the existing rural character and surrounding natural environment.

The house straddles the military crest of the hilltop, in front, and to the side of the Norfolk datum, allowing the existing Pohutakawa grove to provide a point of arrival from the west.

It is positioned with an east-west orientation overlooking the undulating farm pasture, cliffs and gullies, and outwards towards the foreshore and Pacific Ocean.

The house is a simple agrarian barn like form, placed gently atop of two modest timber clad sleeping quarters, arranged in a manner to provide multiple sheltered outdoor space for the varying weather conditions of the coastal environment.

A solid blockwork chimney anchors the gable form to the site but does not break the ridge line, in this case it provides strength in plan while eliminating its impact at the ridge by reducing to a simple steel flue.

The gable form is seen as a modest extension of the hilltop slopes with specific localized planting of native trees to the south and north to break the built form of the roof ridge line. The proportion of the rooftop gable emphasizes the horizontal form against the hilltop and provides a sympathetic built relationship to the surrounding topography.

The two modest sleeping quarters have been kept low in height and compact in plan, with a focus on a rich material finish and balance of proportions, rather than abundance of footprint, assisting with the reduction of built form when viewed from afar.

The Minor Dwelling

Guest accommodation is provided for in a separate minor dwelling, located near the southeastern corner of the extended house site. Modest in size, the guest quarters provide self-contained accommodation, conceived as a simple form arranged along the eastern slope to provide solar gain from east through to west for the primary living quarters. The guest house sits lightly on the land, resting on piled foundations and hovering above the existing landform.

External material selections are consistent with those in the main home, but of a darker tone, to allow the buildings form to sit resesively against the adjacent bushline.

Existing coastal vegetation is extended, enclosing the building, providing a sheltered bush retreat, and celebrating the coastal planting and views afforded from this location.

The building siting mirrors the primary dwelling, slung below the hilltop on the southern slope to ensure its form and roofline are below the ridge, and surrounded by coastal fauna to appear a natural extension of the existing landscape along this boundary.

Materials

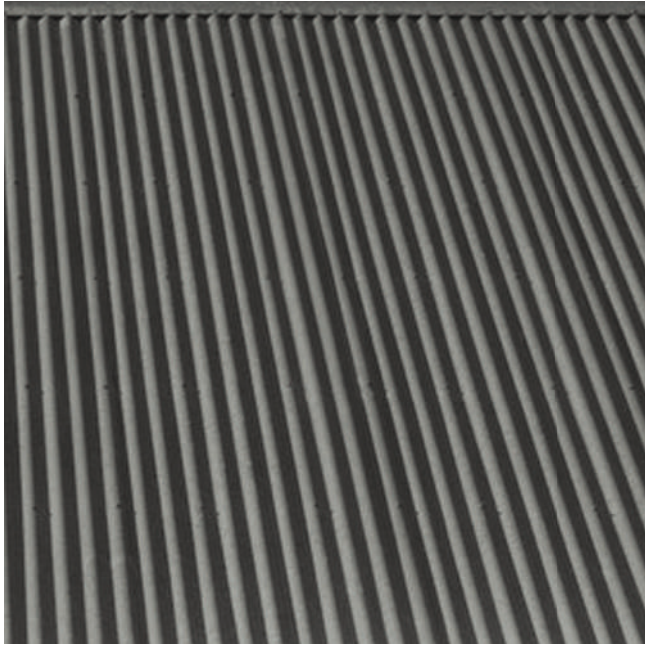
Self-finishing materials have been selected for both building types to strengthen the sense of occupation in a manner that is complementary to the natural backdrop. Chosen specifically to weather and age to match the natural colours of the site and surrounding landscape.

Profiled metal corrugate roofing complemented by gridded timber joinery, selected in light and mid tone shades of brown, provide low reflectivity values, a soft tone that complements the chosen cladding, to both recede into the façade and eliminate any potential glare via the use of large eave overhangs.

Ballast stone lined membrane roofing to flat roof elements will utilise river stones coloured akin to the allowed Mataka material palette, minimizing the extent of metal roofing and producing an additional tone to the roof, 5th elevation.

Hard landscaping elements include stone paving to outdoor living areas closest to the dwelling together with natural gravel surfaces, continuing the natural palette of materials. Driveway and vehicle parking areas are similarly finished with gravel maintaining the Stations rural and infromal character. Some manipulation of stock fencing is proposed, in the style of existing, celebrating the pastoral landscape.

MATERIAL SELECTIONS



1 ROOF + RAINWATER

R-01 Typical Gable Roof

MATERIAL - Aluminium

COLOUR - Dark grey Schist coloured corrugated profile

LRV - 28%



2 ROOF + RAINWATER

R-02 Typical Membraned Ballast Flat Roof

MATERIAL - Loose laid ballast river pebbles, 30mm dia

COLOUR - (selection TBC)

LRV - 20%



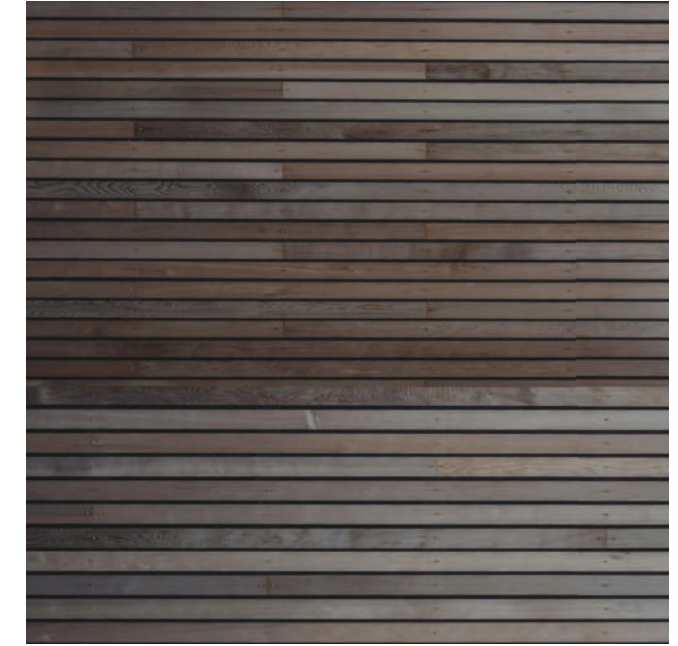
3 EXTERIOR WALLS + CLADDING

EW-01 Typical Exterior Cladding (Guest & Main Suite)

MATERIAL - Western Red Cedar, bevel back weatherboard

COLOUR - Weathered grey (selection TBC) 90x28mm

LRV - 24%



4 EXTERIOR WALLS + CLADDING

EW-02 Typical Exterior Cladding (Main House)

MATERIAL - Western Red Cedar, shiplap weatherboard

COLOUR - Weathered grey (selection TBC) 90x28mm

LRV - 67%



5 WINDOW JOINERY & GLAZING SYSTEMS

J-06 Aluminum Window Joinery & Glazing

MATERIAL - Aluminium profile. Minimum 25-micron

COLOUR - Champagne anodised finish

LRV - 35%



6 WINDOW JOINERY & GLAZING SYSTEMS

J-01 - J-05 Hardwood Joinery

MATERIAL - Iroko hardwood

COLOUR - Brown

LRV - 24%



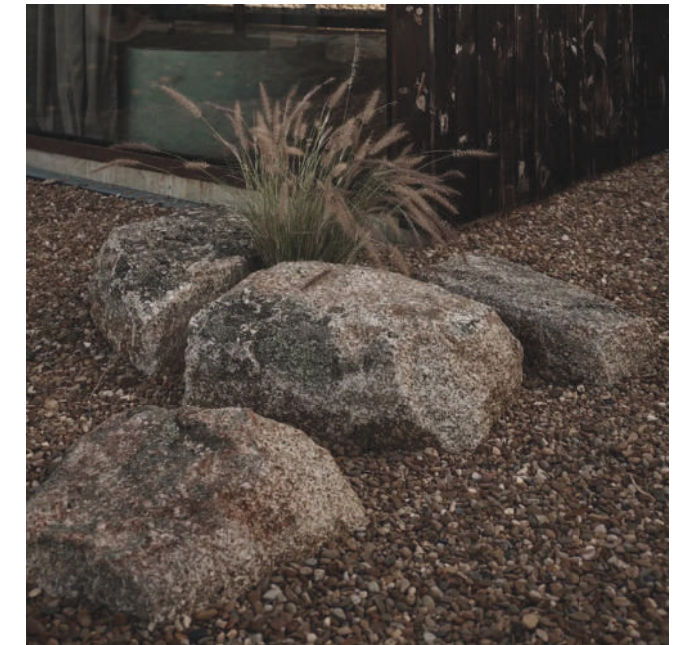
7 EXTERNAL HARD LANDSCAPING

P-01 Gravel & Basalt Stone Mix

MATERIAL - Gravel & Basalt Stone Mix

COLOUR - Grey

LRV - 32%



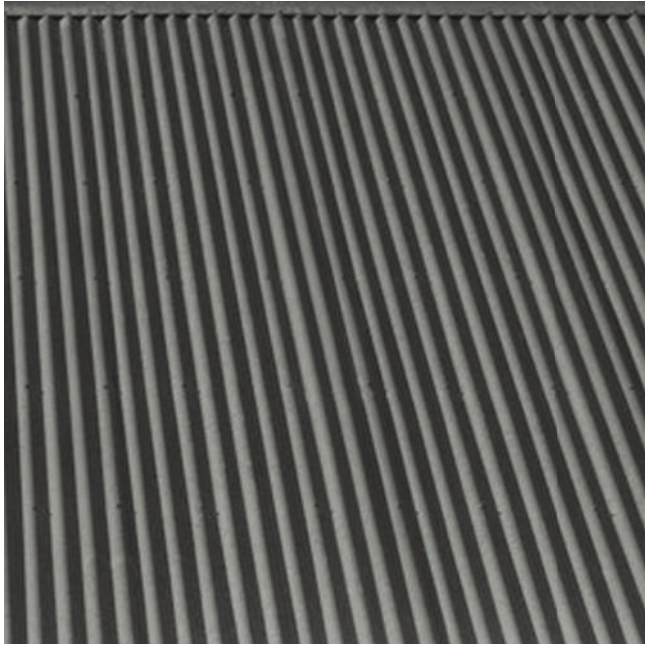
8 EXTERNAL SOFT LANDSCAPING

Q-01 Gravel Mix

MATERIAL - 10-20mm Mangatangi Gold / Gravel

COLOUR - Greys & Browns

LRV - 10%



1 ROOF + RAINWATER

R-03 Typical Gable Roof (Cabin)

MATERIAL - Aluminium

COLOUR - Dark grey Schist coloured corrugated profile

LRV - 28%



2 ROOF + RAINWATER

RW-03 Typical Guttering & Spouting

MATERIAL - Copper half round & 75mm downpipes

COLOUR - Weathered Copper

LRV - 9%



3 EXTERIOR WALLS + CLADDING

EW-03 Typical Exterior Cladding (Cabin)

MATERIAL - Western Red Cedar, bevel back weatherboard

COLOUR - Weathered dark grey (selection TBC) 90x28mm

LRV - 18%



6 WINDOW JOINERY & GLAZING SYSTEMS

J-02 - J-05 Hardwood Joinery

MATERIAL - Iroko hardwood

COLOUR - Brown

LRV - 24%



5 WINDOW JOINERY & GLAZING SYSTEMS

J-01 Aluminum Window Joinery & Glazing

MATERIAL - Aluminium profile. Minimum 25-micron

COLOUR - Dark champagne anodised finish

LRV - 30%



5 EXPOSED STRUCTURAL FOUNDATIONS

S-03 Exterior Timber Piles

MATERIAL - Dark Stained Hardwood

COLOUR - Dark Grey

LRV - 19%



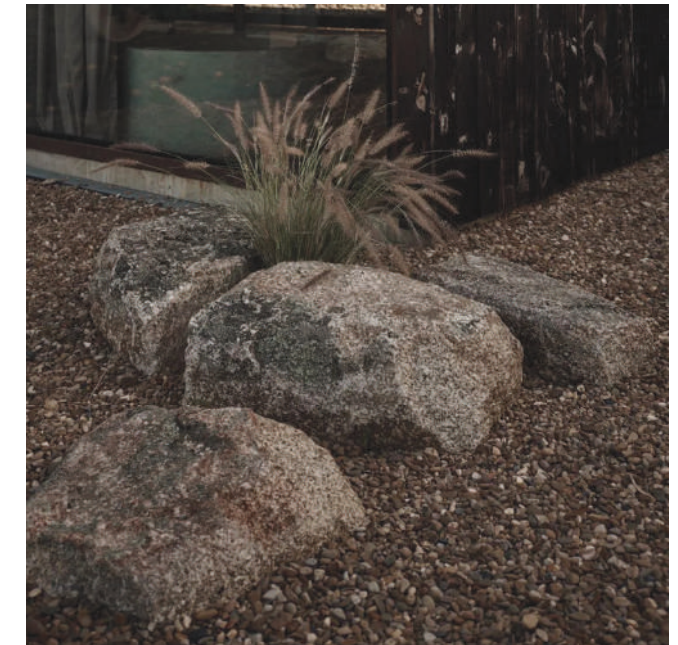
8 EXTERNAL HARD LANDSCAPING

P-02 Hardwood Timber Decking

MATERIAL - 20mm Weathered Purpleheart Timber

COLOUR - Weathered Grey

LRV - 10%



8 EXTERNAL SOFT LANDSCAPING

Q-01 Gravel Mix

MATERIAL - 10-20mm Mangatangi Gold / Gravel

COLOUR - Greys & Browns

LRV - 10%

CHESHIRE ARCHITECTS



GEOTECHNICAL REPORT

FOR
PROPOSED PRIMARY AND MINOR RESIDENCE

AT

LOT 4 MATAKA STATION

**PURERUA PENINSULA
NORTHLAND**

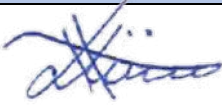

For

MICHAEL GILSON & JOAN MCPHEE

Job No: 23-038A
Date: 19/12/2024

Level 1 ANZ Bank Building 90 Kerikeri Road, Kerikeri, New Zealand
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APPENDIX A

AUGER HOLE LOGS
SCALA PENETROMETER SHEET
SOKAGE TEST SHEET
SLOPE STABILITY ANALYSIS
GEOTECHNICAL DRAWINGS

APPENDIX B

PS1 TP58
TP58 APPENDIX E
SUITABLE PLANT SPECIES LIST
HYNDS X-PERCO SPECIFICATIONS
X-PERCO PUMP SPECIFICATIONS

APPENDIX C

CIVIL ENGINEERING DRAINAGE PLANS

1. INTRODUCTION

This is an updated version of the previous Site suitability report titled 'Site suitability and stability report', 2023, which had been used for the owners Michael Gilson and Joan McPhee to plan for the development of the site at Lot 4 Mataka Station. This report has been prepared to provide additional information and site-specific geotechnical requirements specifically for foundation design for the proposed development of a Primary dwelling and minor caretakers dwelling as set out in the Architectural plans provided by Cheshire architects, specifically the site plan labelled Landscape Plan & Donaldsons Survey Plan 2023, has been utilized for this report. Reference should be made to the included site plans in Appendix B.

This report is based on site investigations undertaken in 2023 for the main residence and more recently in Nov 2024 for the minor residence and includes the original stability modelling and stability zoning for the primary building platform as well as an extension of this modelling and zoning for the minor residence. The slope stability analysis and modelling has been undertaken using current best practice and modelling with Geo studio Slope/W software. It also incorporates valuable data which was collected in the report prepared by PK Engineering Ltd titled 'Site suitability and stability report for Lot 4 Mataka Subdivision for Mr Dennis Guise and Nominees at Purerua Peninsula Northland dated 29 May 2003 (Job No 03-21)'.

The following main aspects of future development has been considered in this report.

- Stability and Zoning
- Foundation requirements
- Wastewater & Stormwater
- Earthworks and Access

This report is designed to support a resource consent and building consent application with Far North District Council, as well as help designers Architects and structural engineers to undertake their designs, along with ensuring the site is managed in a sustainable manner.

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2. GENERAL SITE DESCRIPTION

(Refer to included site plan by Cheshire Architects provided in Appendix B

The area of interest for future development is located at the North - Eastern portion of Lot 4. In particular, the area to the east of the main roadway that exists across this lot to provide access to neighbouring lots towards the south. The main geotechnical feature is the presence of a ridgeline that traverses in a North-East to South-West direction and provides a stable feature for this landform. The existing roadway is located on this ridgeline to the North. The East facing shoulder of the ridge slopes at varying gradients towards the coastline to the East. The first 15 to 20 metres are at a gentle gradient of approximately 8 to 10 degrees. These slopes become much steeper further out from the ridgeline. In close proximity to the coastline, exposed coastal greywacke rock is present and has been eroded by geological process to exist at slopes of between 45 to 60 degrees. The shoulder of the main ridge is interspersed with minor secondary ridges which have deeply incised gully's in between. This lot has such a gully to the north and south of the area of interest for future development on Lot 4. The eastern and southern portion of this portion of lot 4 is covered in dense native vegetation. The remainder of this area is covered in pasture. Electrified fence lines exist as shown in the site plan. A solitary Norfolk pine tree is located in close proximity to the highest point of the main ridge.



Figure 1: Lot 4 Mataka Station Aerial Image.

3. SITE INVESTIGATIONS

Background Research

The existing property file on Lot 4 at Far North District Council was obtained and all the relevant information of this lot was studied including the geotechnical report prepared approximately 20 years ago.

A) Main Dwelling/Residence Site Investigation 2023– (Refer to site plans Appendix B)

In order to gain specific stability and geotechnical data for the main building platform - Six sub-surface exploratory auger holes were drilled in the locations shown on the plans. In-situ undrained shear strength readings were taken at regular depths and cone penetrometer tests were performed in the base of these auger holes. The cone tests were done to the depth where it was no longer viable to penetrate into the existing rock – i.e., depth to refusal.

B) Slope Stability Analysis

Using the information obtained from the field investigations slope stability analysis was performed (refer to Appendix C) on the critical slope profiles using Geo-studio-Slope/W and factors of safety were derived for various conditions of saturation of the upper clay layers. This stability analysis is discussed in more detail below.

C) Minor Residence Site investigation 2024 and Slope stability modelling

We have carried out a further two 50mm hand auger holes with Shear vanes at regular intervals and cone penetrometer testing in the base until refusal in weathered rock. The attached site plan in appendix B indicates the location of these AH7 & AH8 auger holes in the vicinity of the proposed minor residence. We used this data illustrated in cross section E-E to extend our geotechnical model for the site and define the stability for the minor residence. We determined that the ground conditions around the minor residence comprise of the 5-6 metres of very stiff clayey Silt overlying weathered greywacke- this correlates with the information found around the primary dwelling.

Table 1: Subsurface data

| Item | Auger Depth (m) | Rock Intercept (m) | Scala Depth (m) | GWL |
|---------|-----------------|--------------------|-----------------|-----|
| AH1/PT1 | 3.0 | 5.15 | 6.0 | - |
| AH2/PT2 | 2.1 | 3.25 | 3.6 | - |
| AH3/PT3 | 1.8 | 3.5 | 3.8 | - |
| AH4/PT4 | 1.90 | 2.8 | 3.75 | - |
| AH5/PT5 | 2.00 | 3.4 | 4.05 | - |
| AH6/PT6 | 2.40 | 3.0 | 3.25 | - |
| AH7/PT7 | 3.0 | 5.04 | 6.3 | - |
| AH8/PT8 | 3.0 | 4.05 | 4.9 | - |

4. GEOLOGY

The site has a thin veneer of clayey topsoil (average depth 200mm) overlaying a layer of silty clay, which is at least 4 meters deep. This clay layer is the end product of the weathering down of coastal Greywacke rock and has been classified as Marua Silty Clay Loam. The underlying rock is comprised of Greywacke and Argillite, which appears to be closely fractured.

5. NATURAL HAZARDS

There are no natural, earthquake, flood or tsunami hazards for this site, due to elevation above the coastal and river flood plains. The site is elevated on average along RL 100. The site is located well away from any known active fault zones. The only natural hazard which requires addressing is land stability which is addressed in the following sections.

6. SITE STABILITY AND ZONING FOR PRIMARY DWELLING

The sub-surface auger holes completed in 2023 in the area of interest, shown on the Site plan A (Refer Appendix B) reveal a 3 to 6 meter deep layer of marua clay existing in very good condition. Most of the in-situ shear vane readings showed strengths in excess of 100 kPa shear strength. The clay layers were in reasonably dry condition despite the large amount of rainfall for the first 6 months of this year. Reference shall be made to the auger hole logs presented in Appendix A

The results of slope stability analysis indicates that the steep north-eastern slopes will be prone to slippage under conditions of excessive saturation. The mode of failure is expected

to be in the form of a shallow but lengthy slip, which would less than 6 metres deep. The area which is expected to be affected by this type of instability has been highlighted on the included site plans, and marked as ZONE A. It is recommended that no foundations be located in the areas identified as stability sensitive ZONE A.

The area immediately adjacent to Zone A which has been marked as Zone B has been classified as a region with moderate stability. Foundations may be placed in this zone provided they are deeply founded. Reinforced concrete piled foundations are recommended in this ZONE B, with a minimum depth of 8.0 metres into the existing natural ground - i.e., minimum of 2.0m of anchorage into the semi weathered greywacke rock. All foundations and retaining walls in this zone are to be designed by a suitably qualified Geotechnical Engineer.

6.1 SPECIFIC FOUNDATION RECOMENDATIONS MAIN DWELLING

The architectural plans have been overlayed onto our stability zoning (refer to sheet SG1 in appendix B) and a site walkover was undertaken to see the proposed location of the main dwelling which at the time was survey pegged. The location of the main dwelling is well within Zone C (Stable Zone). The foundations in this zone must allow for the highly expansive nature of the Marua clay that exists on Lot 4. The soil type cannot be classified as "Good ground" as per the definition in NZS 3604 due to its highly expansive behaviour.

If a rib raft type of foundation is desired, then the following procedures will make it feasible.

- Rib-Raft type foundation must have a minimum of 250mm of GAP40 hardfill underneath.
- Trees that grow to large sizes should not be planted in close proximity to any foundation.
- No stormwater discharge should be allowed to occur close to any rib raft foundation.
- A bidim A19 Geofabric (or similar) must be provided between the clay and hardfill interface.
- Proper control joints must be provided in the slab if the aspect ratio breaches 1 in 2 and the length of any slab exceeds 20 metres.
- A chartered professional engineer must be engaged to design any such rib raft foundation.
- Hardfill for the rib-raft foundation should be compacted 1000mm past the foundation edge all around.
- According to our information the leading Northern edge of the building requires engineered fill to reach the subgrade. This portion of the building will need to be designed by a suitably chartered professional engineer. Any fill under the building platform must be GAP 40/20 hardfill certified a chartered professional engineer.

The following parameters can be utilized for the design of foundations within this ZONE C (The stable zone).

CLAY

| | |
|--|-----------------------|
| Bulk density | = 18kN/m ³ |
| Ultimate bearing capacity | = 300kPa |
| Safe bearing capacity (F.O.S =3.0) | = 100kPa |
| Dependable bearing capacity ($\phi=0.5$) | = 150kPa |

WEATHERED GREYWACKE ROCK

| | |
|-----------------------------|-----------------------|
| Bulk density | = 32kN/m ³ |
| Ultimate bearing capacity | = 6MPa |
| Safe bearing capacity | = 2MPa |
| Dependable bearing capacity | = 4MPa |

6.2 SITE STABILITY AND ZONING FOR MINOR DWELLING.

A slope stability analysis has been provided in appendix A for the minor dwelling, indicating that the factors of safety against slippage along a portion of the building closest to the steeper slopes is between 1.0 and 1.5. This has allowed us to determine the location of ZONE B & ZONE C boundaries. ZONE B has been mapped as 8-10 metres wide.

The minor dwelling has been positioned such that its foundations for two thirds of the dwelling will be within the ZONE B, as shown on the Site plan Sheet SG1 (appendix B). This will require piled foundations 1.5 metres into the weathered greywacke rock- effectively providing resistance to slippage and maintaining a reasonable factor of safety against instability.

The foundations for the minor dwelling within Zone C can consist of a typical pole type platform to bridge over any expansive layers.

The following soils parameters should be used when designing foundations within ZONE B.

CLAY

Bulk density = 18 kNm³
Internal angle of friction of clay = 25 degrees
Cohesion = 10kPa

WEATHERED GREYWACKE ROCK

Bulk density = 32kNm³
Internal angle of friction = 45°
Cohesion = 0. kPa

It is imperative that no stormwater concentrations or stormwater runoff be discharged around the proposed building platforms, especially in the areas marked ZONE A and ZONE B. All stormwaters should be collected and piped well away from the building site and discharged in the manner explained in the stormwater section (section 6) of this report.

The soils classified as marua clay show a high degree of expansive behaviour. All foundations which are of a shallow nature must be founded a minimum of 500mm below any cut faces to prevent the effect of swell/shrink behaviour.

The marua clay soil suite is susceptible to creep type of behaviour when it is present on slopes with gradient greater than 20 to 25 degrees. Any foundations which fall under these conditions must allow for the lateral effects of the creep behaviour. It would be recommended that a geotechnical engineer familiar with these soil conditions be engaged to design foundations for buildings which fall into this category. Marua clays are not prone to liquefaction and remain reasonably stable under cyclic loadings.

6.3 RETAINING WALLS.

Any retaining greater than 1.0 metre of height or subject to surcharge loading (buildings, driveways, or backslope exceeding 15 degrees) should be designed by a suitably experienced chartered professional engineer. Where applicable retaining walls are to provide support to cut faces. All retaining wall heights should be verified prior to structural design.

6.4 SEISMIC SUBSOIL CLASS

This site is considered Subsoil Class C – Shallow soil site as defined by NZS 1170.5 (2004) “Structural Design Actions) Part 5: Earthquake actions – New Zealand “based on the greater than 3 metres of soil encountered on the site.

7. EARTHWORKS RECCOMENDATIONS

7.1 SITE PREPARATION AND EARTHWORKS

All topsoil or fill must be removed, and subgrade should be approved by a suitably qualified engineer prior to placement of any fill. These surfaces are also recommended to be proof rolled prior to placement of hardfill or clay fill.

It is the responsibility of the designer, project manager and contractor to read this report and ensure that the following recommendations are adhered to prior to any construction. Undertaking earthworks carefully and as per recommendations is critical to the short term and long-term stability of the site. Failure to comply with the following recommendations could undermine either of those aspects.

PK Engineering Ltd is of the view that any earthworks undertaken in winter months is not recommended. If the project manager requires a winter construction, they should submit a construction methodology for review prior to the start of any work. The person or persons in charge of this methodology should be familiar with documents such as GD05 - “Erosion and sediment control for land disturbing activities in the Auckland region”

7.1.1 CUT BATTER SLOPES

The upslope areas which are outside the areas of ZONE A & B will sustain vertical cut slopes of up to a height of 1.5 meters with batter slope angles of 25 degrees. Any slopes which need to be cut to a greater height than 1.5 meters or batter angles steeper than 25 degrees will need to be retained. The soils parameters listed above shall be used to design any such retaining structures. Any excavation that will not be retained will need to be covered by a suitable geofabric and or vegetated immediately to prevent frittering and erosion due to wetting and drying cycles.

Marua clay is sensitive to erosion if left exposed to the elements.

7.1.2 ENGINEERED FILL

Care must be taken to place fill for the building platforms in a controlled manner so not undermine the stability of the slopes and buildings. It appears fill will be required along the leading edge of the main dwelling. This fill needs to be designed by a suitably qualified engineer. The fill must be finished at gradients of 1 vertical to 2 horizontal (Approx 25 degrees). All clay fill is to be well compacted with a sheepsfoot roller to achieve a minimum in situ undrained strength of 120kPa.

7.1.3 SITE DRAINAGE

Drainage measures should be in place so that no pooling or concentrated water is on or around the building platform, this includes short term and long-term drainage measures. Care should be taken to provide a system of silt control measures so that no migration of sediment occurs outside the boundaries of the property during construction. A full drainage and silt control plan has been provided in Appendix C. Refer to Sheets EW1.0 – EW1.4.

7.1.4 FOUNDATION PREPARATION

All foundations should be free of excessive soil spoils or water prior to approval by an engineer to pour concrete. Foundations should be protected from direct water; stormwater flows in the event that they cannot be poured prior to rainfall.

8. STORMWATER

Reference should be made to Appendix C Civil engineering plans. Sheets S1-EW1.4.

The careful management of stormwater runoff is vital to the continued stability of the proposed building site.

There are two discharge points required for stormwater flows from the hard surfaces on this site. Reference should be made to sheet S1 in appendix C for these locations.

1. Stormwater from the following sources should be piped via Ø300 Culvert Sock directly to the naturally occurring flow path which exists along the coastline to the north.

- Main Dwelling Water tank overflows.
- Gutter and spouting overflows.
- Paved areas (grated drains and cesspits)
- Driveway drains
- Subsurface drains behind retaining walls and Water tanks.

It is proposed to use a series of Cesspits to Drain these overflows to the culvert socks as shown on the drawing sheets S1-S2 in Appendix B.

2. Stormwater from the Caretakers/Minor Residence should be discharged to a small 10,000L -15,000L Water tank will provide some attenuation and then discharge via a solid Ø150 Upvc pipe to the outflow to the west as shown on the Sheet S1 and S2 of appendix C. Where a proposed Manhole with Scruffy dome over a Ø500 Deep bore into the Weathered Rock can be utilized to drain stormwater overflows into the crevices in the rock. Well below any unstable layers. Vetiver grass rows downslope should be planted to limit erosion in the event that stormwater overflows through the scruffy dome.

9. EFFLUENT DISPOSAL

The soils that exist on this site exhibit moderate to low permeability rates. It has been classified as a Category 5 type of earth as per the recommendations set by Technical Publications TP58. Reference Should be made to Soakage testing which was undertaken within the vicinity of the proposed disposal field, the results are shown in Appendix A.

Due to the intermittent nature of the expected occupancy on this site we recommend utilising a passive aerated wastewater treatment system capable of treating a maximum expected flow of 2,000litres a day. An X-Perco powerless treatment system producing secondary treated effluent is ideal for this property.

Discharge from the treatment plant to be pumped to a disposal field consisting of 571 lineal meters of sub-surface pressure compensating irrigation lines. The irrigation lines to be buried 250mm deep in narrow shallow trenches as detailed on Sheet S4 Trench Detail, Appendix C. The trenches to be excavated on contour, spaced 1m apart and lined with a root inhibiting material i.e Bidim A19 to prevent tree roots from damaging the lines. Irrigation lines to have emitters spaced at 1m c/c. 100 – 200mm of topsoil/mulch to cover the trenches. The whole disposal field area to be planted in suitable plant species. Refer Suitable Plant Species List Appendix A.

This design is based on a maximum, though intermittent, 10-person occupancy using 200ltrs/day per person giving a total maximum wastewater production of 2000ltrs/day and a loading rate of 3.5ltrs/m²/day.

This design relies on a Roof water tank supply with a Type B wastewater source, for Households with standard fixtures, no garbage grinder as per Technical Publication TP58 Table 6.2. Space is available for a 30% reserve area.

All drain laying should be undertaken by a licensed drainlayer. All solid pipes to have flexible connections due to the presence of large trees. A surface water diversion drains to be constructed on the upslope side of the disposal field.

Only bio-degradable detergents and cleaning agents are to be used in any water entering the treatment system.

It must be ensured that the wastewater disposal field and reserve area of the new aerated wastewater system maintain the following minimum setback distances:

- 1.5m from property boundary
- 3m from buildings
- 30m from surface water
- 5m from downslope identified stormwater flow path
- 0.6m above the winter groundwater table.
- 3m from retaining walls and Water tanks.
- 10m buffer zone below lowest irrigation line for slopes over 10 degrees
- Must be located on slopes less than 18 degrees: The proposed irrigation lines are located within slopes between 8-16 degrees.

10. ACCESS AND SERVICES

Access is proposed to be via a 3-4m wide by almost 70 metres long gravel driveway as shown on the architectural plans this access will follow the centre of the ridgeline where the least amount of Cut is required. An accessway long section and cross sections A-A and B-B have been provided on sheets S5A-S5C indicating the geometry. The Accessway complies to the FNDC 2023 Engineering standards for private accessway with the gradients being less 22.5%.or 12.6 degrees. Any stormwater concentration from the driveway formation must be discharged as recommended in the stormwater section (6) of this report. Any excavations made to install services (e.g. telephone cable power cable etc)

Should be back filled with well compacted hard fill and capped with a minimum of 300mm of clay later to prevent stormwater infiltration into the slopes.

11. RECOMMENDATIONS

I recommend that:

- No foundations be located in ZONE A as shown on the site plans.
- Any foundation located in ZONE B be founded at least 8 meters into the stiff natural ground and be designed by a suitably qualified and registered Geotechnical Engineer.
- Any retaining walls in ZONE B be designed by a suitable qualified and registered Geotechnical Engineer.
- All rib-raft type foundations must have 250mm of certified hardfill underneath.
- On-site wastewater disposal to be managed sustainably as described in section 9.
- Stormwater be managed as describe in section 8.

12. CONCLUSION

The chosen area of Lot 4 is suitable for future development provided the stormwater and wastewater flows can be managed as per the recommended data in this report. A suitably qualified and experienced geotechnical engineer must be engaged to design all the foundations for structures on Lot 4 and incorporate the recommendations for foundation designs in the report.

13. LIMITATIONS

This report should be read and produced in its entirety including the limitations to understand the context of the opinions and recommendations given.

This report has been prepared exclusively for Michael Gilson and Joan Mcphee in accordance with the brief given to us and the agreed scope and will be deemed exclusive to the owner. Information, opinions, and recommendations contained in this report can only be used for the purposes with which it was intended. PK Engineering Ltd accepts no liability or responsibility for any use or reliance on this report by any party other than the owner or parties working for or on behalf of the owner, such as local authorities. This report is not to be used for purposes beyond those for which it was intended for. This report was prepared in general accordance with current standards, codes and best practice at the time of this report. These may be subject to change.

The description of soils and analysis is based upon soil mapping in set locations on the site. It has been assumed that soil conditions are consistent with the discoveries in their location - there may be unforeseen variation in between. If any variation is found during the construction phase, then PK Engineering Ltd must be notified as soon as possible to advise on any changes to foundations that may be necessary.

APPENDIX A

AUGER HOLE LOGS
SCALA PENETROMETER SHEET
SOKAGE TEST SHEET
SLOPE STABILITY ANALYSIS
GEOTECHNICAL DRAWINGS

APPENDIX B

PS1 TP58
TP58 APPENDIX E
SUITABLE PLANT SPECIES LIST
HYNDS X-PERCO SPECIFICATIONS
X-PERCO PUMP SPECIFICATIONS

APPENDIX C

CIVIL ENGINEERING DRAINAGE PLANS

APPENDIX A

BOREHOLE LOG NO - 1

Project: Lot 4 - Mataka Station
 Client: Gilison, M & J
 Job No: 23-038



| | | | | | | | | | |
|----------------|------|-------|------|------|----------|------|--------------|------------------------------|--|
| Graphic Symbol | @@@ | ##### | %%% | 000 | ++++ | █ | DDDD | In situ shear vane reading | |
| | FILL | CLAY | SILT | SAND | TOP SOIL | ROCK | Organic Soil | Remoulded shear vane reading | |
| | | | | | | | | Scale Penetrometer | |

| Depth (mm) | Graphical Log | GWL | Soil Type | Field Description | Undrained Shear Strength (kPa) | Scale Penetrometer (blows/300mm) | | |
|------------|---------------|------------------------------------|-----------------------|--|--------------------------------|--|--|--|
| | +++++ | Ground Water Level not Intercepted | MARUA BROWN CLAY LOAM | TOPSOIL | | | | |
| | +++++ | | | | | | | |
| 300 | %%% | | | | | | | |
| | %%% | | | | | | | |
| 600 | %%% | | | | | Clayey, SILT, yellowish brown, very stiff, dry, low plasticity | | |
| | %%% | | | | | | | |
| 900 | %%% | | | | | | | |
| | %%% | | | | | | | |
| 1200 | %%% | | | | | | | |
| | %%% | | | | | minor white sand inclusions | | |
| 1500 | %%% | | | | | | | |
| | %%% | | | | | | | |
| 1800 | ##### | | | | | | | |
| | ##### | | | | | CLAY, brownish orange, very stiff, moist, low plasticity | | |
| 2100 | ##### | | | | | | | |
| | ##### | | | | | | | |
| 2400 | %%% | | | | | | | |
| | %%% | | | | | Clayey SILT, white, hard, moist, low plasticity | | |
| 2700 | %%% | | | | | | | |
| | %%% | | | | | | | |
| 3000 | | | | E.O.B at 3.0m. | | | | |
| 3300 | | | | | | | | |
| 3600 | | | | | | | | |
| 3900 | | | | Where Sacla Penetrometer reading 8 blows/50mm Classification of material assumed as moderately weathered greywacke rock | | | | |
| 4200 | | | | | | | | |
| 4500 | | | | | | | | |
| 4800 | | | | | | | | |
| 5100 | | | | | | | | |
| 5400 | | | Rock | | | | | |

| | | |
|---------------|----------------------|---|
| Drill Methods | 50-100 mm hand auger | Note: |
| Test Location | Refer to site plan | 1. The subsurface data described above has been determined at a specific borehole location. The data will not identify any variations away from the location. |
| Test Date | 20/07/2023 | |
| Inspector | KC | 2. UTP - Unable to penetrate. |

BOREHOLE LOG NO - 2

Project: Lot 4 - Mataka Station
 Client: Gilison, M & J
 Job No: 23-038



| | | | | | | | | | |
|----------------|------|-------|------|------|----------|------|--------------|------------------------------|---|
| Graphic Symbol | @@@ | ##### | %%% | 000 | ++++ | ■ | DDDD | In situ shear vane reading | ■ |
| | FILL | CLAY | SILT | SAND | Top Soil | Rock | Organic Soil | Remoulded shear vane reading | ■ |
| | | | | | | | | Scale Penetrometer | ● |

| Depth (mm) | Graphical Log | GWL | Soil Type | Field Description | Undrained Shear Strength (kPa) | Scale Penetrometer (blows/300mm) |
|------------|---------------|------------------------------------|-----------------------|---|--------------------------------|----------------------------------|
| | +++++ | Ground Water Level not Intercepted | MARUA BROWN CLAY LOAM | TOPSOIL | 228 | |
| 300 | ##### | | | CLAY, yellowish brown, hard, dry, low plasticity | 212 | |
| 600 | ##### | | | white sandy streaks starting to show | 179 | |
| 900 | ##### | | | | 196 | |
| 1200 | ##### | | | Silty CLAY, grey, very stiff, moist, low plasticity | 212 | |
| 1500 | ##### | | | | 147 | |
| 1800 | ##### | | | CLAY, yellowish brown, hard, dry, low plasticity | 228 | |
| 2100 | ##### | | | E.O.B at 2.10m (UTP) | | |
| 2400 | | | | | | |
| 2700 | | | | | | |
| 3000 | | | | | | |
| 3300 | | | | | | |
| 3600 | ■ | | | | | |
| 3900 | | | | | | |
| 4200 | | | | | | |
| 4500 | | | | | | |
| 4800 | | | | | | |
| 5100 | | | | | | |
| 5400 | | | | | | |

Where Sacla Penetrometer reading 8 blows/50mm
 Classification of material assumed as moderately weathered greywacke rock

| | | |
|---------------|----------------------|---|
| Drill Methods | 50-100 mm hand auger | Note: |
| Test Location | Refer to site plan | 1. The subsurface data described above has been determined at a specific borehole location. The data will not identify any variations away from the location. |
| Test Date | 20/07/2023 | |
| Inspector | KC | 2. UTP - Unable to penetrate. |

BOREHOLE LOG NO - 3

Project: Lot 4 - Mataka Station
 Client: Gilison, M & J
 Job No: 23-038



| | | | | | | | | | |
|----------------|------|-------|------|------|----------|------|--------------|------------------------------|--|
| Graphic Symbol | @@@ | ##### | %%% | ØØØ | | ■ | ÐÐÐÐ | In situ shear vane reading | |
| | FILL | CLAY | SILT | SAND | TOP SOIL | ROCK | Organic Soil | Remoulded shear vane reading | |
| | | | | | | | | Scale Penetrometer | |

| Depth (mm) | Graphical Log | GWL | Soil Type | Field Description | Undrained Shear Strength (kPa) | Scale Penetrometer (blows/300mm) |
|------------|---------------|------------------------------------|-----------------------|--|--------------------------------|----------------------------------|
| | | Ground Water Level not Intercepted | MARUA BROWN CLAY LOAM | TOPSOIL | | |
| 300 | ##### | | | CLAY, brownish yellow, very stiff, dry, low plasticity | | |
| 600 | ##### | | | very stiff to hard | | |
| 900 | ##### | | | | | |
| 1200 | ##### | | | | | |
| 1500 | ##### | | | Silty CLAY, with minor ash inclusions, hard, dry, low plasticity | | |
| 1800 | ##### | | | CLAY, yellowish brown, minor gravel inclusions, hard, moist *LP | | |
| 2100 | | | | E.O.B at 1.80m (UTP) | | |
| 2400 | | | | Where Sacla Penetrometer reading 8 blows/50mm Classification of material assumed as moderately weathered greywacke rock | | |
| 2700 | | | | | | |
| 3000 | | | | | | |
| 3300 | | | | | | |
| 3600 | | | | | | |
| 3900 | | | | | | |
| 4200 | | | | | | |
| 4500 | | | | | | |
| 4800 | | | | | | |
| 5100 | | | | | | |
| 5400 | | | | | | |

| | | |
|---------------|----------------------|--|
| Drill Methods | 50-100 mm hand auger | Note: 1. The subsurface data described above has been determined at a specific borehole location. The data will not identify any variations away from the location. 2. UTP - Unable to penetrate. *Low Plasticity |
| Test Location | Refer to site plan | |
| Test Date | 20/07/2023 | |
| Inspector | KC | |

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BOREHOLE LOG NO - 4

Project: Lot 4 - Mataka Station
 Client: Gilison, M & J
 Job No: 23-038



| | | | | | | | | | |
|----------------|------|-------|------|------|----------|------|--------------|------------------------------|--|
| Graphic Symbol | @@@ | ##### | %%% | ØØØ | +++++ | ■ | DDDD | In situ shear vane reading | |
| | FILL | CLAY | SILT | SAND | TOP SOIL | ROCK | Organic Soil | Remoulded shear vane reading | |
| | | | | | | | | Scale Penetrometer | |

| Depth (mm) | Graphical Log | GWL | Soil Type | Field Description | Undrained Shear Strength (kPa) | Scale Penetrometer (blows/300mm) | |
|------------|---------------|------------------------------------|-----------------------|--|--|----------------------------------|--|
| | +++++ | Ground Water Level not Intercepted | MARUA BROWN CLAY LOAM | TOPSOIL | | | |
| 300 | ##### | | | CLAY, brownish orange, hard, dry, low plasticity | | | |
| 600 | ##### | | | yellow with specs of red and white | | | |
| 900 | ##### | | | orange with streaks of red | | | |
| 1200 | ##### | | | red, rootlets from pohutakawa tree | | | |
| 1500 | ##### | | | E.O.B at 1.90m (UTP) | | | |
| 1800 | ##### | | | GREYWACKE ROCK | Where Sacla Penetrometer reading 8 blows/50mm Classification of material assumed as moderately weathered greywacke rock | | |
| 2100 | | | | | | | |
| 2400 | | | | | | | |
| 2700 | | | | | | | |
| 3000 | | | | | | | |
| 3300 | | | | | | | |
| 3600 | | | | | | | |
| 3900 | | | | | | | |
| 4200 | | | | | | | |
| 4500 | | | | | | | |
| 4800 | | | | | | | |
| 5100 | | | | | | | |
| 5400 | | | | | | | |

| | | |
|---------------|----------------------|--|
| Drill Methods | 50-100 mm hand auger | Note: 1. The subsurface data described above has been determined at a specific borehole location. The data will not identify any variations away from the location. 2. UTP - Unable to penetrate. |
| Test Location | Refer to site plan | |
| Test Date | 20/07/2023 | |
| Inspector | KC | |

BOREHOLE LOG NO - 5

Project: Lot 4 - Mataka Station
 Client: Gilison, M & J
 Job No: 23-038



| | | | | | | | | | |
|----------------|------|-------|------|------|----------|------|--------------|------------------------------|--|
| Graphic Symbol | @@@ | ##### | %%% | ØØØ | ++++ | ■ | DDDD | In situ shear vane reading | |
| | FILL | CLAY | SILT | SAND | TOP SOIL | ROCK | Organic Soil | Remoulded shear vane reading | |
| | | | | | | | | Scale Penetrometer | |

| Depth (mm) | Graphical Log | GWL | Soil Type | Field Description | Undrained Shear Strength (kPa) | Scale Penetrometer (blows/300mm) | | | |
|------------|---------------|------------------------------------|-----------------------|-------------------|--------------------------------|--|---------|--|--|
| | +++++ | Ground Water Level not Intercepted | MARUA BROWN CLAY LOAM | TOPSOIL | | | | | |
| 300 | ##### | | | | | | 78 186 | | |
| 600 | ##### | | | | | CLAY, yellow, very stiff, dry, low plasticity | 85 163 | | |
| 900 | ##### | | | | | | 104 168 | | |
| 1200 | %%% | | | | | Silty CLAY, with white, grey and red specs, hard, dry, low plasticity | 228 | | |
| 1500 | ##### | | | | | red becoming more prominent | 228 | | |
| 1800 | ##### | | | | | | 228 | | |
| 2100 | | | | | | E.O.B at 2000mm (UTP) | | | |
| 2400 | | | | | | Where Sacla Penetrometer reading 8 blows/50mm Classification of material assumed as moderately weathered greywacke rock | | | |
| 2700 | | | | | | | | | |
| 3000 | | | | | | | | | |
| 3300 | | | | | GREYWACKE ROCK | | | | |
| 3600 | | | | | | | | | |
| 3900 | | | | | | | | | |
| 4200 | | | | | | | | | |
| 4500 | | | | | | | | | |
| 4800 | | | | | | | | | |
| 5100 | | | | | | | | | |
| 5400 | | | | | | | | | |

| | | |
|---------------|----------------------|--|
| Drill Methods | 50-100 mm hand auger | Note: 1. The subsurface data described above has been determined at a specific borehole location. The data will not identify any variations away from the location. 2. UTP - Unable to penetrate. |
| Test Location | Refer to site plan | |
| Test Date | 20/07/2023 | |
| Inspector | KC | |

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BOREHOLE LOG NO - 6

Project: Lot 4 - Mataka Station
 Client: Gilison, M & J
 Job No: 23-038



| | | | | | | | | | |
|----------------|------|-------|------|------|----------|-------|--------------|------------------------------|--|
| Graphic Symbol | @@@ | ##### | %%% | ØØØ | +++++ | █████ | DDDD | In situ shear vane reading | |
| | FILL | CLAY | SILT | SAND | TOP SOIL | ROCK | Organic Soil | Remoulded shear vane reading | |
| | | | | | | | | Scale Penetrometer | |

| Depth (mm) | Graphical Log | GWL | Soil Type | Field Description | Undrained Shear Strength (kPa) | Scale Penetrometer (blows/300mm) | |
|------------|---------------|------------------------------------|-----------------------|--|--------------------------------|----------------------------------|--|
| | +++++ | Ground Water Level not Intercepted | MARUA BROWN CLAY LOAM | TOPSOIL | | | |
| 300 | ##### | | | CLAY, brownish orange, very stiff, dry, low plasticity | 109 | 184 | |
| 600 | ##### | | | | 142 | 183 | |
| 900 | ##### | | | dry to moist, very stiff to hard | 171 | 225 | |
| 1200 | ##### | | | | | 228 | |
| 1500 | ##### | | | mottled grey specs, gravel inclusions, hard | | 228 | |
| 1800 | ##### | | | | | 228 | |
| 2100 | ##### %%% | | | | | 228 | |
| 2400 | ##### | | | | | 228 | |
| 2700 | ##### | | | | | | |
| 3000 | ##### | | | | | | |
| 3300 | ##### | | | | | | |
| 3600 | ##### | | | | | | |
| 3900 | ##### | | | | | | |
| 4200 | ##### | | | | | | |
| 4500 | ##### | | | | | | |
| 4800 | ##### | | | | | | |
| 5100 | ##### | | | | | | |
| 5400 | ##### | | | | | | |
| | | | | SEMI WEATHERED GREYWACKE ROCK | | | |
| | | | | | E.O.B at 2.40m (UTP) | | |
| | | | | Where Sacla Penetrometer reading 8 blows/50mm Classification of material assumed as moderately weathered greywacke rock | | | |

| | | |
|---------------|----------------------|--|
| Drill Methods | 50-100 mm hand auger | Note: 1. The subsurface data described above has been determined at a specific borehole location. The data will not identify any variations away from the location. 2. UTP - Unable to penetrate. *Low Plasticity |
| Test Location | Refer to site plan | |
| Test Date | 20/07/2023 | |
| Inspector | KC | |

| P K ENGINEERING LIMITED | | | | | | | | | | | | | | PENETROMETER HOLE No. | | | | | |
|--|-----|-----|-----|-----|-------|-----|-----|-----|-----|-------|------|-----|-----|-----------------------|-------|-----|-----|-----|-----|
| 90 KERIKERI RD Phone (09) 4073255 EMAIL pk.engin@pkengin.co.nz | | | | | | | | | | | | | | SHT. 1 of 2 | | | | | |
| Location: Lot 4 Mataka station | | | | | | | | | | | | | | Job No. 23-038 | | | | | |
| Driven by: KC | | | | | | | | | | | | | | Date: 20/07/2023 | | | | | |
| R.L at Ground Level: n/a | | | | | | | | | | | GWL: | | | | | | | | |
| Depth | PT1 | PT2 | PT3 | PT4 | Depth | PT1 | PT2 | PT3 | PT4 | Depth | PT1 | PT2 | PT3 | PT4 | Depth | PT1 | PT2 | PT3 | PT4 |
| 50 | | | | | 2550 | | 4 | 4 | 6 | 5050 | 7 | | | | 7550 | | | | |
| 100 | | | | | 2600 | | 4 | 3 | 6 | 5100 | 6 | | | | 7600 | | | | |
| 150 | | | | | 2650 | | 4 | 5 | 6 | 5150 | 8 | | | | 7650 | | | | |
| 200 | | | | | 2700 | | 4 | 4 | 6 | 5200 | 7 | | | | 7700 | | | | |
| 250 | | | | | 2750 | | 6 | 6 | 6 | 5250 | 8 | | | | 7750 | | | | |
| 300 | | | | | 2800 | | 5 | 8 | 8 | 5300 | 8 | | | | 7800 | | | | |
| 350 | | | | | 2850 | | 5 | 7 | 8 | 5350 | 7 | | | | 7850 | | | | |
| 400 | | | | | 2900 | | 5 | 8 | 8 | 5400 | 9 | | | | 7900 | | | | |
| 450 | | | | | 2950 | 4 | 5 | 5 | 7 | 5450 | 10 | | | | 7950 | | | | |
| 500 | | | | | 3000 | 3 | 5 | 5 | 8 | 5500 | 11 | | | | 8000 | | | | |
| 550 | | | | | 3050 | 3 | 5 | 5 | 7 | 5550 | 9 | | | | 8050 | | | | |
| 600 | | | | | 3100 | 2 | 5 | 6 | 8 | 5600 | 9 | | | | 8100 | | | | |
| 650 | | | | | 3150 | 3 | 7 | 5 | 7 | 5650 | 8 | | | | 8150 | | | | |
| 700 | | | | | 3200 | 5 | 7 | 6 | 8 | 5700 | 10 | | | | 8200 | | | | |
| 750 | | | | | 3250 | 3 | 9 | 7 | 8 | 5750 | 8 | | | | 8250 | | | | |
| 800 | | | | | 3300 | 3 | 10 | 7 | 10 | 5800 | 9 | | | | 8300 | | | | |
| 850 | | | | | 3350 | 5 | 10 | 7 | 8 | 5850 | 8 | | | | 8350 | | | | |
| 900 | | | | | 3400 | 4 | 10 | 7 | 8 | 5900 | 10 | | | | 8400 | | | | |
| 950 | | | | | 3450 | 7 | 12 | 7 | 7 | 5950 | 10 | | | | 8450 | | | | |
| 1000 | | | | | 3500 | 5 | 11 | 8 | 7 | 6000 | 8 | | | | 8500 | | | | |
| 1050 | | | | | 3550 | 5 | 14 | 8 | 7 | 6050 | | | | | 8550 | | | | |
| 1100 | | | | | 3600 | 5 | 12 | 7 | 9 | 6100 | | | | | 8600 | | | | |
| 1150 | | | | | 3650 | 4 | | 7 | 10 | 6150 | | | | | 8650 | | | | |
| 1200 | | | | | 3700 | 6 | | 12 | 11 | 6200 | | | | | 8700 | | | | |
| 1250 | | | | | 3750 | 3 | | 14 | 12 | 6250 | | | | | 8750 | | | | |
| 1300 | | | | | 3800 | 5 | | 11 | | 6300 | | | | | 8800 | | | | |
| 1350 | | | | | 3850 | 4 | | | | 6350 | | | | | 8850 | | | | |
| 1400 | | | | | 3900 | 4 | | | | 6400 | | | | | 8900 | | | | |
| 1450 | | | | | 3950 | 3 | | | | 6450 | | | | | 8950 | | | | |
| 1500 | | | | | 4000 | 2 | | | | 6500 | | | | | 9000 | | | | |
| 1550 | | | | | 4050 | 7 | | | | 6550 | | | | | 9050 | | | | |
| 1600 | | | | | 4100 | 5 | | | | 6600 | | | | | 9100 | | | | |
| 1650 | | | | | 4150 | 5 | | | | 6650 | | | | | 9150 | | | | |
| 1700 | | | | | 4200 | 5 | | | | 6700 | | | | | 9200 | | | | |
| 1750 | | | | | 4250 | 7 | | | | 6750 | | | | | 9250 | | | | |
| 1800 | | | 3 | | 4300 | 6 | | | | 6800 | | | | | 9300 | | | | |
| 1850 | | | 2 | | 4350 | 5 | | | | 6850 | | | | | 9350 | | | | |
| 1900 | | | 2 | 2 | 4400 | 6 | | | | 6900 | | | | | 9400 | | | | |
| 1950 | | | 3 | 2 | 4450 | 7 | | | | 6950 | | | | | 9450 | | | | |
| 2000 | | | 2 | 3 | 4500 | 6 | | | | 7000 | | | | | 9500 | | | | |
| 2050 | | | 3 | 2 | 4550 | 6 | | | | 7050 | | | | | 9550 | | | | |
| 2100 | | 2 | 4 | 2 | 4600 | 9 | | | | 7100 | | | | | 9600 | | | | |
| 2150 | | 4 | 5 | 3 | 4650 | 7 | | | | 7150 | | | | | 9650 | | | | |
| 2200 | | 3 | 5 | 3 | 4700 | 6 | | | | 7200 | | | | | 9700 | | | | |
| 2250 | | 3 | 5 | 4 | 4750 | 5 | | | | 7250 | | | | | 9750 | | | | |
| 2300 | | 3 | 4 | 4 | 4800 | 6 | | | | 7300 | | | | | 9800 | | | | |
| 2350 | | 3 | 5 | 4 | 4850 | 7 | | | | 7350 | | | | | 9850 | | | | |
| 2400 | | 3 | 4 | 5 | 4900 | 6 | | | | 7400 | | | | | 9900 | | | | |
| 2450 | | 5 | 5 | 5 | 4950 | 6 | | | | 7450 | | | | | 9950 | | | | |
| 2500 | | 5 | 4 | 6 | 5000 | 9 | | | | 7500 | | | | | #### | | | | |

| P K ENGINEERING LIMITED | | | | | | | | | | | | | | PENETROMETER HOLE No. | | | | | |
|--|-----|-----|-----|-----|-------|-----|-----|-----|-----|-------|-----|-----|-----|-----------------------|-------|-----|-----|-----|-----|
| 90 KERIKERI RD Phone (09) 4073255 EMAIL pk.engin@pkengin.co.nz | | | | | | | | | | | | | | SHT. 2 2 | | | | | |
| Location: Lot 4 Mataka Station | | | | | | | | | | | | | | Job No. 23-038 | | | | | |
| Driven by: KC | | | | | | | | | | | | | | Date: 20/07/2023 | | | | | |
| R.L at Ground Level: n/a | | | | | | | | | | GWL: | | | | | | | | | |
| Depth | PT5 | PT6 | PT7 | PT8 | Depth | PT5 | PT6 | PT7 | PT8 | Depth | PT5 | PT6 | PT7 | PT8 | Depth | PT5 | PT6 | PT7 | PT8 |
| 50 | | | | | 2550 | 3 | 6 | | | 5050 | | | | | 7550 | | | | |
| 100 | | | | | 2600 | 5 | 6 | | | 5100 | | | | | 7600 | | | | |
| 150 | | | | | 2650 | 5 | 7 | | | 5150 | | | | | 7650 | | | | |
| 200 | | | | | 2700 | 4 | 7 | | | 5200 | | | | | 7700 | | | | |
| 250 | | | | | 2750 | 4 | 6 | | | 5250 | | | | | 7750 | | | | |
| 300 | | | | | 2800 | 4 | 6 | | | 5300 | | | | | 7800 | | | | |
| 350 | | | | | 2850 | 4 | 5 | | | 5350 | | | | | 7850 | | | | |
| 400 | | | | | 2900 | 5 | 6 | | | 5400 | | | | | 7900 | | | | |
| 450 | | | | | 2950 | 5 | 7 | | | 5450 | | | | | 7950 | | | | |
| 500 | | | | | 3000 | 4 | 8 | | | 5500 | | | | | 8000 | | | | |
| 550 | | | | | 3050 | 7 | 11 | | | 5550 | | | | | 8050 | | | | |
| 600 | | | | | 3100 | 8 | 9 | | | 5600 | | | | | 8100 | | | | |
| 650 | | | | | 3150 | 7 | 12 | | | 5650 | | | | | 8150 | | | | |
| 700 | | | | | 3200 | 6 | 10 | | | 5700 | | | | | 8200 | | | | |
| 750 | | | | | 3250 | 6 | 11 | | | 5750 | | | | | 8250 | | | | |
| 800 | | | | | 3300 | 6 | | | | 5800 | | | | | 8300 | | | | |
| 850 | | | | | 3350 | 6 | | | | 5850 | | | | | 8350 | | | | |
| 900 | | | | | 3400 | 9 | | | | 5900 | | | | | 8400 | | | | |
| 950 | | | | | 3450 | 10 | | | | 5950 | | | | | 8450 | | | | |
| 1000 | | | | | 3500 | 8 | | | | 6000 | | | | | 8500 | | | | |
| 1050 | | | | | 3550 | 7 | | | | 6050 | | | | | 8550 | | | | |
| 1100 | | | | | 3600 | 6 | | | | 6100 | | | | | 8600 | | | | |
| 1150 | | | | | 3650 | 6 | | | | 6150 | | | | | 8650 | | | | |
| 1200 | | | | | 3700 | 8 | | | | 6200 | | | | | 8700 | | | | |
| 1250 | | | | | 3750 | 10 | | | | 6250 | | | | | 8750 | | | | |
| 1300 | | | | | 3800 | 9 | | | | 6300 | | | | | 8800 | | | | |
| 1350 | | | | | 3850 | 9 | | | | 6350 | | | | | 8850 | | | | |
| 1400 | | | | | 3900 | 9 | | | | 6400 | | | | | 8900 | | | | |
| 1450 | | | | | 3950 | 10 | | | | 6450 | | | | | 8950 | | | | |
| 1500 | | | | | 4000 | 11 | | | | 6500 | | | | | 9000 | | | | |
| 1550 | | | | | 4050 | 11 | | | | 6550 | | | | | 9050 | | | | |
| 1600 | | | | | 4100 | | | | | 6600 | | | | | 9100 | | | | |
| 1650 | | | | | 4150 | | | | | 6650 | | | | | 9150 | | | | |
| 1700 | | | | | 4200 | | | | | 6700 | | | | | 9200 | | | | |
| 1750 | | | | | 4250 | | | | | 6750 | | | | | 9250 | | | | |
| 1800 | | | | | 4300 | | | | | 6800 | | | | | 9300 | | | | |
| 1850 | | | | | 4350 | | | | | 6850 | | | | | 9350 | | | | |
| 1900 | | | | | 4400 | | | | | 6900 | | | | | 9400 | | | | |
| 1950 | | | | | 4450 | | | | | 6950 | | | | | 9450 | | | | |
| 2000 | | | | | 4500 | | | | | 7000 | | | | | 9500 | | | | |
| 2050 | 3 | | | | 4550 | | | | | 7050 | | | | | 9550 | | | | |
| 2100 | 3 | | | | 4600 | | | | | 7100 | | | | | 9600 | | | | |
| 2150 | 2 | | | | 4650 | | | | | 7150 | | | | | 9650 | | | | |
| 2200 | 2 | | | | 4700 | | | | | 7200 | | | | | 9700 | | | | |
| 2250 | 2 | | | | 4750 | | | | | 7250 | | | | | 9750 | | | | |
| 2300 | 2 | | | | 4800 | | | | | 7300 | | | | | 9800 | | | | |
| 2350 | 3 | | | | 4850 | | | | | 7350 | | | | | 9850 | | | | |
| 2400 | 4 | 4 | | | 4900 | | | | | 7400 | | | | | 9900 | | | | |
| 2450 | 4 | 7 | | | 4950 | | | | | 7450 | | | | | 9950 | | | | |
| 2500 | 3 | 6 | | | 5000 | | | | | 7500 | | | | | #### | | | | |

| | | | | | | | | | |
|----------------|------|-------|------|------|------|----------|--------------|------------------------------|--------------------|
| Graphic Symbol | @@@ | | ### | 000 | ■ | | DDDD | In situ shear vane reading | Scale Penetrometer |
| | FILL | CLAY | SILT | SAND | ROCK | TOP SOIL | Organic Soil | Remoulded shear vane reading | |

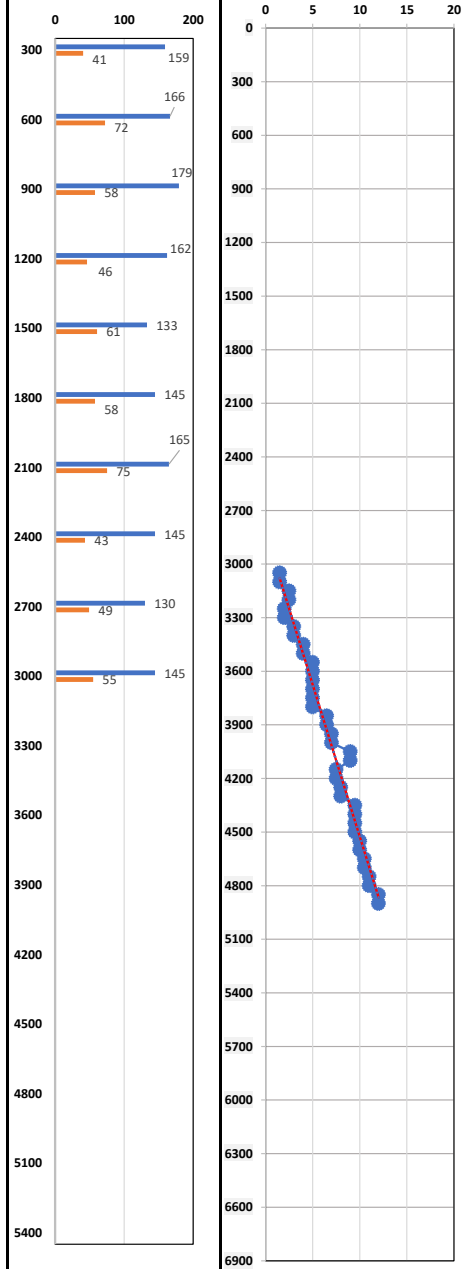
| Depth (mm) | Soil /Rock Graphical Log | GEOLOGY | LAYERS | Field Description | GWL | Undrained Shear Strength (kPa) | Scala Penetrometer (blows/50mm) | |
|------------|--------------------------|--|--|--|---------------------|--|---------------------------------|------------------|
| 0-300 | #### | Waipapa Group Sandstone & Siltstone (Waipapa Composite Terrane) - (age 154-270 MA) | Marua Clay/Rangiora Loam (Residual Soil) | (CLAYEY TOPSOIL Approx 200mm) (0.2m) - Clayey SILT, light brown, very stiff, dry, moderate plasticity. | GWL NOT ENCOUNTERED | 0-300: 52, 182 | 0-300: 0-2 | |
| 300-600 | #### | | | (0.6m) Silty CLAY, light brown, very stiff, dry, moderately plastic to highly plastic. (0.9m) reddish brown, clay decreasing | | 600: 64, 162 | 300-600: 2-5 | |
| 600-900 | | | | (1.1m) SILT, some clay, light grey and brown mottled, very stiff, moist, low plasticity. (1.3m) pinkish streaks, moist to wet, (soft in hand) | | 900: 203 | 600-900: 5-10 | |
| 900-1200 | | | | | | 1200: 52, 136 | 900-1200: 10-15 | |
| 1200-1500 | #### | | | | | 1500: 61, 191 | 1200-1500: 15-20 | |
| 1500-1800 | #### | | | | | 1800: 203 | 1500-1800: 20-25 | |
| 1800-2100 | #### | | | | | 2100: 203 | 1800-2100: 25-30 | |
| 2100-2400 | #### | | | | | 2400: 46, 159 | 2100-2400: 30-35 | |
| 2400-2700 | #### | | | | | 2700: 203 | 2400-2700: 35-40 | |
| 2700-3000 | #### | | | | | 3000: 203 | 2700-3000: 40-45 | |
| 3000-3300 | #### | | | Completely Weathered Rock | | (2.0m) Pinkish red, (2.3m) Sandy fine to coarse SILT, pinkish red, very stiff, moist to wet, non-plastic. (2.6m) SILT, some clay, pinkish red, very stiff, moist to wet, low plasticity-non plastic (Some Bedding/Striation) (2.9m) Brown + light grey mottled. | | 3000-3300: 45-50 |
| 3300-3600 | | | | | | E.O.H @3.0m (Target Depth) Scala penetrometer from Base. | | 3300-3600: 50-55 |
| 3600-3900 | | Inferred Highly Weathered Rock Encountered at 5.8m below existing ground level. (Inferred by 8+ blows per 50mm increment of scala) | | | 3600-3900: 55-60 | | | |
| 3900-4200 | | | | | 3900-4200: 60-65 | | | |
| 4200-4500 | | | | | 4200-4500: 65-70 | | | |
| 4500-4800 | | Weathered Greywacke Rock | | | 4500-4800: 70-75 | | | |
| 4800-5100 | | | | | 4800-5100: 75-80 | | | |
| 5100-5400 | | | | | 5100-5400: 80-85 | | | |



| | | |
|---------------|--------------------|--|
| Drill Methods | 50 mm hand auger | Note: All field logging made as per NZGS Guideline 2005 "Field description of Soil and Rock" 1. The subsurface data described above has been determined at a specific borehole location. The data will not identify any variations away from the location. 2. UTP - Unable to penetrate. |
| Test Location | Refer to site plan | |
| Test Date | 19/11/2024 | |
| Drilled By | JW | |

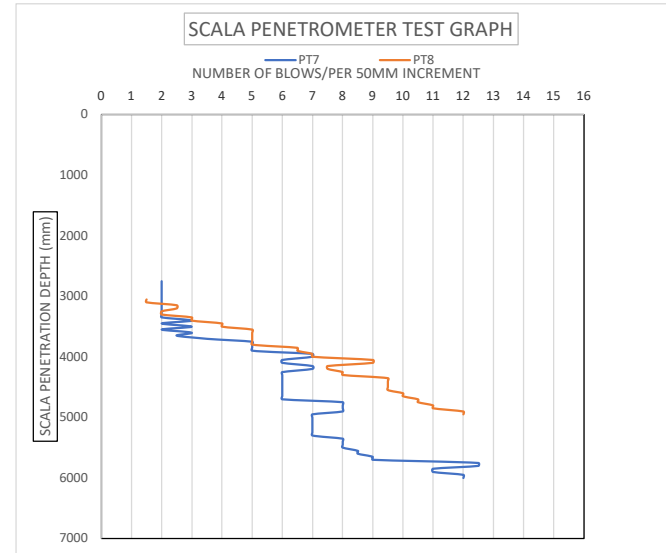
| Graphic Symbol | @@@ | | #### | ooo | ■ | +++ | DDDD | In situ shear vane reading | |
|----------------|------|-------|------|------|------|----------|--------------|------------------------------|--|
| | FILL | CLAY | SILT | SAND | ROCK | TOP SOIL | Organic Soil | Remoulded shear vane reading | |

| Depth (mm) | Soil /Rock Graphical Log | GEOLOGY | LAYERS | Field Description | GWL | Undrained Shear Strength (kPa) | Scala Penetrometer (blows/50mm) |
|------------|--------------------------|--|--|--|---------------------|--------------------------------|---------------------------------|
| 0-300 | #### | Waipapa Group Sandstone & Siltstone (Waipapa Composite Terrane) - (age 154-270 MA) | Marua Clay/Rangiora Loam (Residual Soil) | (CLAYEY TOPSOIL Approx 200mm) (0.2m) - Clayey SILT, light yellowish brown, very stiff, dry, moderate plasticity - high plasticity. | GWL NOT ENCOUNTERED | 41 / 159 | 0-300 |
| 300-600 | #### | | | (0.6m) Silty CLAY, light yellowish brown, very stiff, dry, highly plastic. | | 72 / 166 | 300-600 |
| 600-900 | #### | | | (0.9m) Clayey SILT, light yellowish brown, very stiff, dry, low to moderate plasticity. | | 58 / 179 | 600-900 |
| 900-1200 | #### | | | (1.1m) some clay, light grey and brown mottled, moist, low plasticity. | | 46 / 162 | 900-1200 |
| 1200-1500 | #### | | | (1.5m) light grey and pink mottled, moist to wet | | 61 / 133 | 1200-1500 |
| 1500-1800 | #### | | | (1.8m) light brown + light grey, moist | | 58 / 145 | 1500-1800 |
| 1800-2100 | #### | | | (2.1m) moist to wet. | | 75 / 165 | 1800-2100 |
| 2100-2400 | #### | | | | | 43 / 145 | 2100-2400 |
| 2400-2700 | #### | | | | | 49 / 130 | 2400-2700 |
| 2700-3000 | #### | | | | | 55 / 145 | 2700-3000 |
| 3000-3300 | | Completely Weathered Rock | | | | | |
| 3300-3600 | | | | E.O.H @3.0m (Target Depth) Scala penetrometer from Base. | | | |
| 3600-3900 | | | | | | | |
| 3900-4200 | | | | Inferred Highly Weathered Rock Encountered at 4.25m below existing ground level. (Inferred by 8+ blows per 50mm increment of scala) | | | |
| 4200-4500 | | | Weathered Greywacke Rock | | | | |
| 4500-4800 | | | | | | | |
| 4800-5100 | | | | | | | |



| | | |
|---------------|--------------------|--|
| Drill Methods | 50 mm hand auger | Note: All field logging made as per NZGS Guideline 2005 "Field description of Soil and Rock" 1. The subsurface data described above has been determined at a specific borehole location. The data will not identify any variations away from the location. 2. UTP - Unable to penetrate. |
| Test Location | Refer to site plan | |
| Test Date | 19/11/2024 | |
| Drilled By | JWV | |

| P K ENGINEERING LIMITED | | | | | | | | | | PENETROMETER HOLE No. | | | | | | | | | |
|---|--|--|--|--|-------|-----|------|-----|-----|-----------------------|------|-----|--|--|-------|--|--|--|--|
| 90 KERIKERI RD Phone (09) 4073255 EMAIL pk.engin@pkengin.co.n | | | | | | | | | | SHT. 1 of 1 | | | | | | | | | |
| Location: Lot 4 Mataka Gilson (Caretakers) | | | | | | | | | | Job No. 23-038B | | | | | | | | | |
| Driven by: JW | | | | | | | | | | Date: 19/12/2024 | | | | | | | | | |
| R.L. at Ground Level: n/a | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | Depth | PT7 | PT8 | PT3 | PT4 | Depth | PT7 | PT8 | | | Depth | | | | |
| 50 | | | | | 2550 | | | | | 5050 | 8 | | | | 7550 | | | | |
| 100 | | | | | 2600 | | | | | 5100 | 8 | | | | 7600 | | | | |
| 150 | | | | | 2650 | | | | | 5150 | 8 | | | | 7650 | | | | |
| 200 | | | | | 2700 | | | | | 5200 | 8 | | | | 7700 | | | | |
| 250 | | | | | 2750 | | | | | 5250 | 7 | | | | 7750 | | | | |
| 300 | | | | | 2800 | | | | | 5300 | 7 | | | | 7800 | | | | |
| 350 | | | | | 2850 | | | | | 5350 | 7 | | | | 7850 | | | | |
| 400 | | | | | 2900 | | | | | 5400 | 7 | | | | 7900 | | | | |
| 450 | | | | | 2950 | | | | | 5450 | 7 | | | | 7950 | | | | |
| 500 | | | | | 3000 | | | | | 5500 | 7 | | | | 8000 | | | | |
| 550 | | | | | 3050 | 2 | 1.5 | | | 5550 | 7 | | | | 8050 | | | | |
| 600 | | | | | 3100 | 2 | 1.5 | | | 5600 | 7 | | | | 8100 | | | | |
| 650 | | | | | 3150 | 2 | 2.5 | | | 5650 | 8 | | | | 8150 | | | | |
| 700 | | | | | 3200 | 2 | 2.5 | | | 5700 | 8 | | | | 8200 | | | | |
| 750 | | | | | 3250 | 2 | 2 | | | 5750 | 8 | | | | 8250 | | | | |
| 800 | | | | | 3300 | 2 | 2 | | | 5800 | 8 | | | | 8300 | | | | |
| 850 | | | | | 3350 | 2 | 3 | | | 5850 | 8.5 | | | | 8350 | | | | |
| 900 | | | | | 3400 | 2 | 3 | | | 5900 | 8.5 | | | | 8400 | | | | |
| 950 | | | | | 3450 | 2 | 4 | | | 5950 | 9 | | | | 8450 | | | | |
| 1000 | | | | | 3500 | 2 | 4 | | | 6000 | 9 | | | | 8500 | | | | |
| 1050 | | | | | 3550 | 2 | 5 | | | 6050 | 12.5 | | | | 8550 | | | | |
| 1100 | | | | | 3600 | 2 | 5 | | | 6100 | 12.5 | | | | 8600 | | | | |
| 1150 | | | | | 3650 | 2 | 5 | | | 6150 | 11 | | | | 8650 | | | | |
| 1200 | | | | | 3700 | 3 | 5 | | | 6200 | 11 | | | | 8700 | | | | |
| 1250 | | | | | 3750 | 2 | 5 | | | 6250 | 12 | | | | 8750 | | | | |
| 1300 | | | | | 3800 | 3 | 5 | | | 6300 | 12 | | | | 8800 | | | | |
| 1350 | | | | | 3850 | 2 | 6.5 | | | 6350 | | | | | 8850 | | | | |
| 1400 | | | | | 3900 | 3 | 6.5 | | | 6400 | | | | | 8900 | | | | |
| 1450 | | | | | 3950 | 2.5 | 7 | | | 6450 | | | | | 8950 | | | | |
| 1500 | | | | | 4000 | 3.5 | 7 | | | 6500 | | | | | 9000 | | | | |
| 1550 | | | | | 4050 | 5 | 9 | | | 6550 | | | | | 9050 | | | | |
| 1600 | | | | | 4100 | 5 | 9 | | | 6600 | | | | | 9100 | | | | |
| 1650 | | | | | 4150 | 5 | 7.5 | | | 6650 | | | | | 9150 | | | | |
| 1700 | | | | | 4200 | 5 | 7.5 | | | 6700 | | | | | 9200 | | | | |
| 1750 | | | | | 4250 | 7 | 8 | | | 6750 | | | | | 9250 | | | | |
| 1800 | | | | | 4300 | 7 | 8 | | | 6800 | | | | | 9300 | | | | |
| 1850 | | | | | 4350 | 6 | 9.5 | | | 6850 | | | | | 9350 | | | | |
| 1900 | | | | | 4400 | 6 | 9.5 | | | 6900 | | | | | 9400 | | | | |
| 1950 | | | | | 4450 | 7 | 9.5 | | | 6950 | | | | | 9450 | | | | |
| 2000 | | | | | 4500 | 7 | 9.5 | | | 7000 | | | | | 9500 | | | | |
| 2050 | | | | | 4550 | 6 | 9.5 | | | 7050 | | | | | 9550 | | | | |
| 2100 | | | | | 4600 | 6 | 10 | | | 7100 | | | | | 9600 | | | | |
| 2150 | | | | | 4650 | 6 | 10 | | | 7150 | | | | | 9650 | | | | |
| 2200 | | | | | 4700 | 6 | 10.5 | | | 7200 | | | | | 9700 | | | | |
| 2250 | | | | | 4750 | 6 | 10.5 | | | 7250 | | | | | 9750 | | | | |
| 2300 | | | | | 4800 | 6 | 11 | | | 7300 | | | | | 9800 | | | | |
| 2350 | | | | | 4850 | 6 | 11 | | | 7350 | | | | | 9850 | | | | |
| 2400 | | | | | 4900 | 6 | 12 | | | 7400 | | | | | 9900 | | | | |
| 2450 | | | | | 4950 | 6 | 12 | | | 7450 | | | | | 9950 | | | | |
| 2500 | | | | | 5000 | 6 | | | | 7500 | | | | | 10000 | | | | |



P K ENGINEERING LIMITED

90 KERIKERI RD

Phone (09) 4073255

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BOREHOLE No. AH1
SHT. 1 of 2

Location: MATAKA lot 4


Job No. 03-21













Drilled by: C Greenfield

Date: 6 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Sample/ Test | Shear Strength | | | | Moisture | Origins, Composition, Defects. |
|------|--|---|----------|--------------|----------------|----|--------|-----|----------|--------------------------------|
| | | | | | 40 | 80 | 120 | 160 | | |
| | TOPSOIL, black |  | | | | | | | | |
| | CLAY, stiff, yellowish brown | #### | | | | | 100/26 | | | |
| | | #### | 0.5 | | | | 120/40 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 1.0 | | | | 130/60 | | | |
| | | #### | | | | | | | | |
| | Silty CLAY, v stiff, intermixed light brown/ Greyish white | #### | | | | | | | | |
| | | #### | 1.5 | | | | 140++ | | | |
| | Some gravel | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 2.0 | | | | 140++ | | | |
| | | #### | | | | | | | | |
| | Some gravel (greyish white) | #### | | | | | | | | |
| | | #### | 2.5 | | | | UTP | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | Tending more towards silt | #### | 3.0 | | | | 140++ | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 3.5 | | | | 120/30 | | | |
| | | #### | | | | | | | | |
| | Softer weaker soil | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 4.0 | | | | 140++ | | | |

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BOREHOLE No. AH1
SHT. 2 of 2

Location: MATAKA lot 4

Job No. 03-21

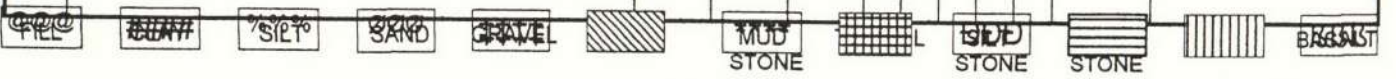
Drilled by: C Greenfield

Date: 6 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Sample/ Test | | | | Moisture | Origins, Composition, Defects. |
|------|---|-------------|----------|--------------|----|-------|-----|----------|--------------------------------|
| | | | | 40 | 80 | 120 | 160 | | |
| | | #### | 4.1 | | | | | | |
| | | #### | | | | | | | |
| | | #### | | | | | | | |
| | | #### | | | | | | | |
| | SILT, tightly packed | %%% | 4.5 | | | 140++ | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | SILT, very tightly packed, dry, intermixed | %%% | 5.0 | | | 140++ | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | 5.5 | | | 140++ | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | SILT, v v tightly packed, greyish white. Depth 5.9m unable to proceed. | DDD | 5.9 | | | | | | |
| | | DDD | 6.0 | | | | | | |



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BOREHOLE No. AH2
SHT. 1 of 2

Location: MATAKA lot 4

Job No. 03-21

Drilled by: C Greenfield

Date: 7 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Sample/ Test | Shear Strength | | | | Moisture | Origins, Composition, Defects. |
|------|--|-------------|----------|--------------|----------------|--------|-----|-----|----------|--------------------------------|
| | | | | | 40 | 80 | 120 | 160 | | |
| | TOPSOIL, black | | | | | | | | | |
| | CLAY, stiff, yellowish brown | ##### | | | | 104/16 | | | | |
| | | ##### | 0.5 | | | 120/60 | | | | |
| | | ##### | | | | | | | | |
| | Some sandy gravel | ##### | | | | | | | | |
| | Sandy CLAY, stiff, yellowish brown. | ##### | 1.0 | | | 84/38 | | | | |
| | Silty CLAY, stiff, yellowish brown. | ##### | | | | | | | | |
| | | ##### | | | | | | | | |
| | Silty CLAY, mottled yellowish brown/ greyish white | ##### | | | | | | | | |
| | | ##### | 1.5 | | | 55/18 | | | | |
| | Silty CLAY, intermixed, greyish white/ Yellowish brown/ brown | ##### | | | | | | | | |
| | | ##### | | | | | | | | |
| | | ##### | 2.0 | | | 130/34 | | | | |
| | | ##### | | | | | | | | |
| | | ##### | | | | | | | | |
| | | ##### | | | | | | | | |
| | | ##### | 2.5 | | | 96/20 | | | | |
| | Clayey SILT, moist | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | 3.0 | | | 140++ | | | | |
| | | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | 3.5 | | | 140++ | | | | |
| | | %%% | | | | | | | | |
| | Sandy GRAVEL, brown | #### | | | | | | | | |
| | | %%% | | | | | | | | |
| | SILT, moist, intermixed greyish white/ Brown | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | 4.0 | | | 140/44 | | | | |

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BOREHOLE No. AH3
SHT. 1 of 1

Location: MATAKA lot 4

Job No. 03-21

Drilled by: C Greenfield

Date: 7 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Sample/ Test | | | | Moisture | Origins, Composition, Defects. |
|------|--|----------------|----------|--------------|----|--------|-----|----------|--------------------------------|
| | | | | 40 | 80 | 120 | 160 | | |
| | TOPSOIL, dark brown | [Grid Pattern] | | | | | | | |
| | CLAY, v stiff, yellowish brown | [Hash Pattern] | 0.5 | | | 130/62 | | | |
| | CLAY, dry, stiff, intermixed yellowish Brown/ greyish white/ brown | [Hash Pattern] | 1.0 | | | 85/15 | | | |
| | Silty CLAY | [Hash Pattern] | 1.5 | | | 140/22 | | | |
| | Some gravel (hard) | [Hash Pattern] | 2.0 | | | 140++ | | | |
| | Gravelly SILT | [Hash Pattern] | | | | | | | |
| | SILT | [Hash Pattern] | 2.5 | | | 140++ | | | |
| | Some gravel (soft & hard) | [Hash Pattern] | 3.0 | | | UTP | | | |
| | Hit rock unable to proceed. | | 3.5 | | | UTP | | | |
| | | | 4.0 | | | | | | |

©PK
[Grid]
[%% %]
[Hash]
GRAVEL [Hash]
[Diagonal]
MANAG STONE [Grid]
[Hash]
STONE [Grid]
[Diagonal]
STONE [Grid]
[Hash]
STONE [Grid]
[Hash]
STONE [Grid]

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BOREHOLE No. AH4
SHT. 1 of 2

Location: MATAKA lot 4


Job No. 03-21









Drilled by: C Greenfield




Date: 7 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Sample/ Test | Shear Strength | | | | Moisture | Origins, Composition, Defects. |
|------|---|---|----------|--------------|----------------|----|--------|-----|----------|--------------------------------|
| | | | | | 40 | 80 | 120 | 160 | | |
| | TOPSOIL, black |  | | | | | | | | |
| | CLAY, stiff, yellowish brown | #### | | | | | | | | |
| | | #### | 0.5 | | | | 122/14 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | CLAY, v stiff, intermixed yellowish Brown/ greyish white/ reddish brown | #### | 1.0 | | | | 135/50 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | CLAY, v stiff, intermixed yellowish Brown/ greyish white/ pinkish red | #### | | | | | | | | |
| | | #### | 1.5 | | | | 130/60 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 2.0 | | | | 135/50 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | CLAY, v stiff, intermixed yellowish Brown/ greyish white/ pinkish red/ brown | #### | 2.5 | | | | 110/42 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | CLAY, v stiff, intermixed brown/ greyish White | #### | | | | | | | | |
| | | #### | 3.0 | | | | 105/60 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 3.5 | | | | 140/54 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 4.0 | | | | 135/60 | | | |

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BOREHOLE No. AH4
SHT. 2 of 2

Location: MATAKA lot 4

Job No. 03-21

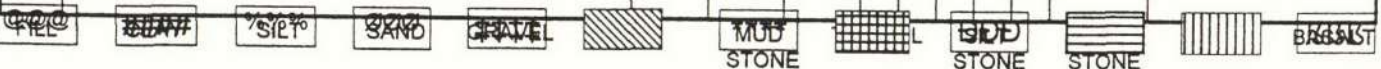
Drilled by: C Greenfield

Date: 7 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Sample/ Test | Shear Strength | | | | Moisture | Origins, Composition, Defects. |
|------|---------------------|-------------|----------|-----------------|----------------|--------|-----|-----|----------|--------------------------------------|
| | | | | | 40 | 80 | 120 | 180 | | |
| | | #### | 4.1 | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 4.5 | | | 110/35 | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 5.0 | | | 120/36 | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 5.5 | | | | | | | |
| | | #### | | | | | | | | |
| | Some dry soil lumps | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 6.0 | | | | | | | |
| | Target depth 6.1m | #### | 6.1 | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
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BOREHOLE No. AH5
SHT. 1 of 2

Location: MATAKA lot 4


Job No. 03-21













Drilled by: C Greenfield

Date: 9 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Sample/ Test | Shear Strength | | | | Moisture | Origins, Composition, Defects. |
|------|--|---|----------|--------------|----------------|----|--------|-----|----------|--------------------------------|
| | | | | | 40 | 80 | 120 | 160 | | |
| | TOPSOIL, dark brown |  | | | | | | | | |
| | CLAY, stiff, yellowish brown | #### | | | | | | | | |
| | | #### | 0.5 | | | | 135/80 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | Some gravel | #### | 1.0 | | | | 118/46 | | | |
| | CLAY, dry, intermixed brown/ greyish White/ pinkish red | #### | | | | | | | | |
| | CLAY, intermixed brown/ greyish white | #### | 1.5 | | | | 130/40 | | | |
| | | #### | | | | | | | | |
| | Some sandy gravel (pinkish red) | #### | 2.0 | | | | 140++ | | | |
| | | #### | | | | | | | | |
| | Sandy SILT, hard packed, dry, Intermixed greyish white/ pink | #### | | | | | | | | |
| | Sandy SILT, hard packed, dry, Intermixed greyish white/ pink/ brown | #### | 2.5 | | | | UTP | | | |
| | | #### | | | | | | | | |
| | Silty CLAY, intermixed brown/ greyish White | #### | 3.0 | | | | 140++ | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 3.5 | | | | 135/50 | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 4.0 | | | | 140/60 | | | |

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BOREHOLE No. AH5
SHT. 2 of 2

Location: MATAKA lot 4

Job No. 03-21

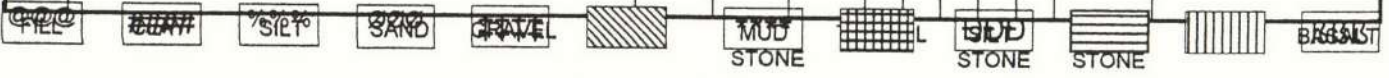
Drilled by: C Greenfield

Date: 9 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Shear Strength | | | | Moisture | Origins, Composition, Defects. |
|------|---|-------------|----------|----------------|----|-------|-----|----------|--------------------------------|
| | | | | 40 | 80 | 120 | 160 | | |
| | | #### | 4.1 | | | | | | |
| | | #### | | | | | | | |
| | | #### | | | | | | | |
| | | #### | | | | | | | |
| | | #### | 4.5 | | | 140++ | | | |
| | | #### | | | | | | | |
| | | #### | | | | | | | |
| | | #### | | | | | | | |
| | | #### | 5.0 | | | 140++ | | | |
| | | #### | | | | | | | |
| | | #### | | | | | | | |
| | Sandy SILT, tightly packed, pinkish red | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | 5.5 | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | | | | | | | |
| | | %%% | 6.0 | | | | | | |
| | Target depth 6.1m | %%% | 6.1 | | | | | | |



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BOREHOLE No. AH6
SHT. 1 of 2

Location: MATAKA lot 4


Job No. 03-21













Drilled by: C Greenfield

Date: 9 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Sample/ Test | Shear Strength | | | | Moisture | Origins, Composition, Defects. |
|------|---|---|----------|--------------|----------------|--------|-----|-----|----------|--------------------------------|
| | | | | | 40 | 80 | 120 | 160 | | |
| | TOPSOIL, dark brown |  | | | | | | | | |
| | CLAY, dry, stiff, yellowish brown | #### | | | | | | | | |
| | | #### | 0.5 | | | 135/50 | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 1.0 | | | 140/65 | | | | |
| | CLAY, intermixed yellowish brown/ Greyish white/ pinkish red | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 1.5 | | | 120/40 | | | | |
| | Some sand | #### | | | | | | | | |
| | CLAY, intermixed brown/ greyish white | #### | 2.0 | | | 112/40 | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 2.5 | | | 130/32 | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | CLAY, intermixed brown/ greyish white/ Pinkish white | #### | 3.0 | | | 98/30 | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 3.5 | | | 130/32 | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 4.0 | | | 130/38 | | | | |

P K ENGINEERING LIMITED

90 KERIKERI RD Phone (09) 4073255 Fax (09) 4073256

BOREHOLE No. AH6
SHT. 2 of 2

Location: MATAKA lot 4

Job No. 03-21

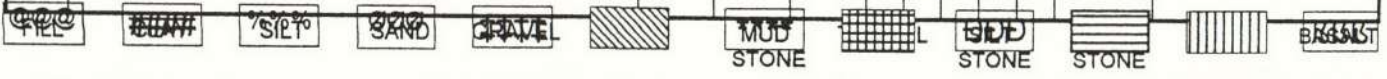
Drilled by: C Greenfield

Date: 9 May 2003

R.L. at Ground Level:

GWL:

| Unit | Soil Description | Soil Symbol | Depth(m) | Sample/ Test | Shear Strength | | | | Moisture | Origins, Composition, Defects. |
|------|---|-------------|----------|--------------|----------------|--------|-----|-----|----------|--------------------------------|
| | | | | | 40 | 80 | 120 | 180 | | |
| | | #### | 4.1 | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | 4.5 | | | 140++ | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | | #### | | | | | | | | |
| | SILT, tightly packed, intermixed brown/ Greyish white | %%% | 5.0 | | | 140/52 | | | | |
| | Some gravel increasing with depth | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | 5.5 | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | | | | | | | | |
| | | %%% | 6.0 | | | | | | | |
| | Target depth 6.1m | %%% | 6.1 | | | | | | | |





Location: LOT 4 MATAKA STATION

Client: GILSONS

Job No: 23-038A

Tested by: JW

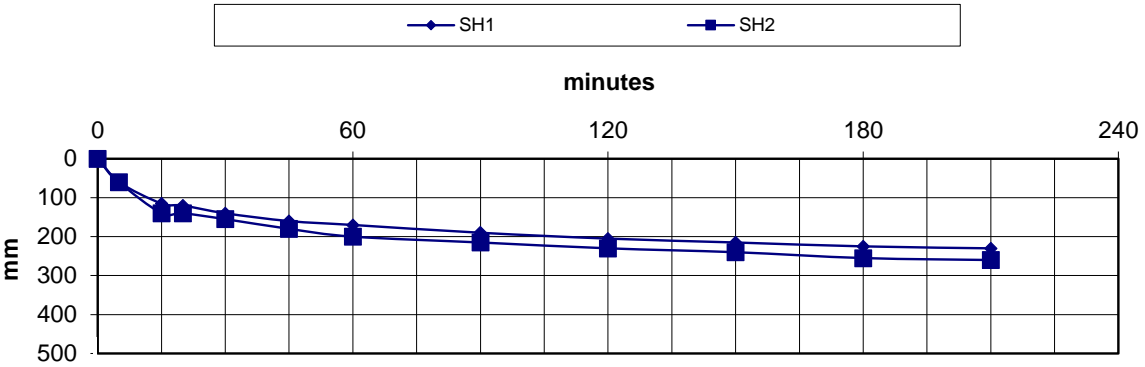
SOAKAGE TEST RESULTS

GWL: NE

Date: 24-10-24

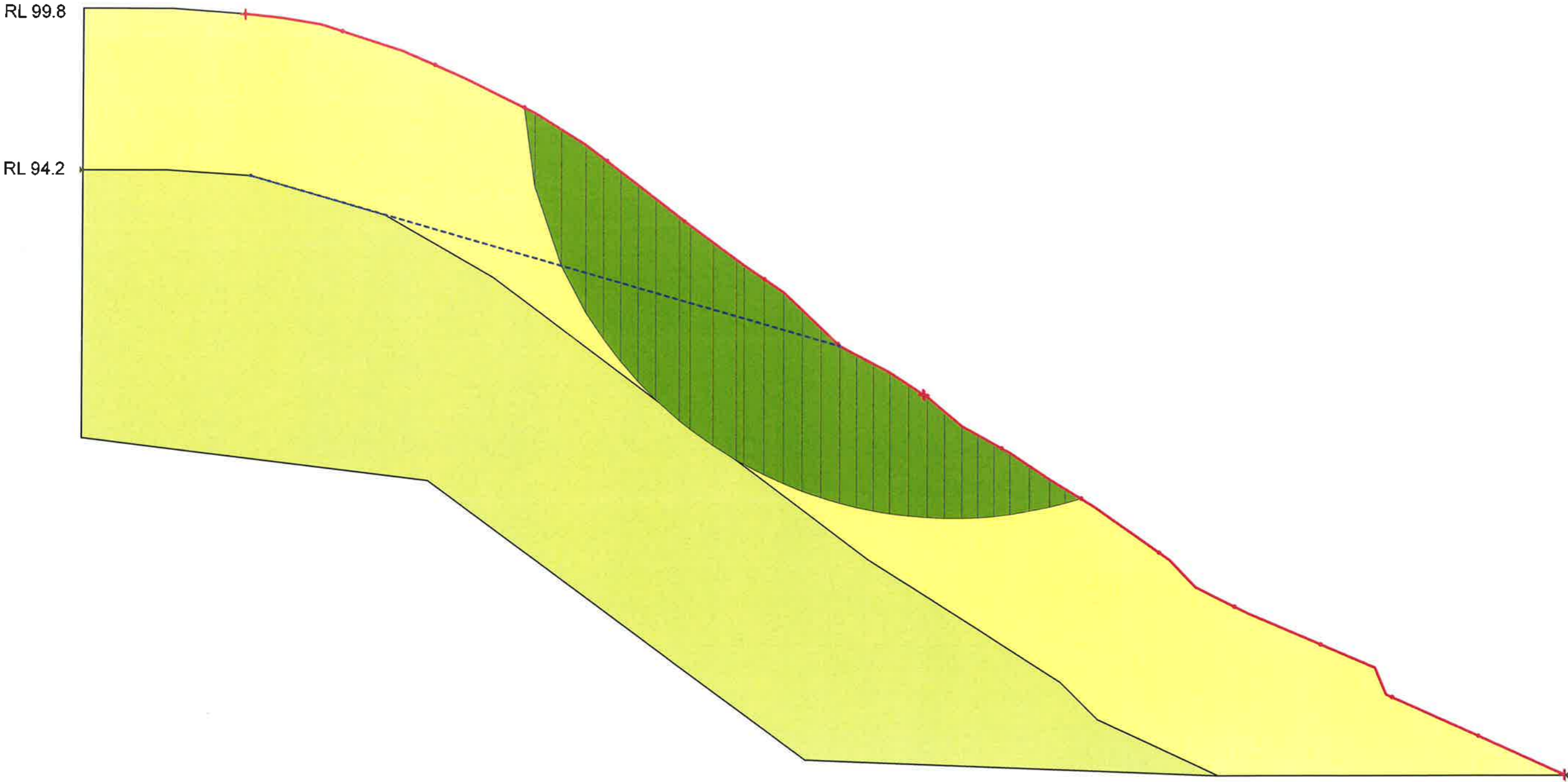
| Soak hole No: | Start | (mins) | | | | | | | | | | | |
|---------------|-------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 0 | 5 | 15 | 20 | 30 | 45 | 60 | 90 | 120 | 150 | 180 | 210 | 240 |
| SH1 | 0 | 60 | 115 | 120 | 140 | 160 | 170 | 190 | 205 | 215 | 225 | 230 | |
| SH2 | 0 | 60 | 140 | 140 | 155 | 180 | 200 | 215 | 230 | 240 | 255 | 260 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

TP58 SOAKAGE TEST



Factor of Safety 0.035

| Color | Name | Slope Stability Material Model | Unit Weight (kNm ³) | Effective Cohesion (kPa) | Effective Friction Angle (°) |
|--------------|---------------------|--------------------------------|---------------------------------|--------------------------|------------------------------|
| Light Yellow | Clay/Silt | Mohr-Coulomb | 18 | 8 | 20 |
| Light Green | Semi-Weathered Rock | Mohr-Coulomb | 32 | 0 | 70 |

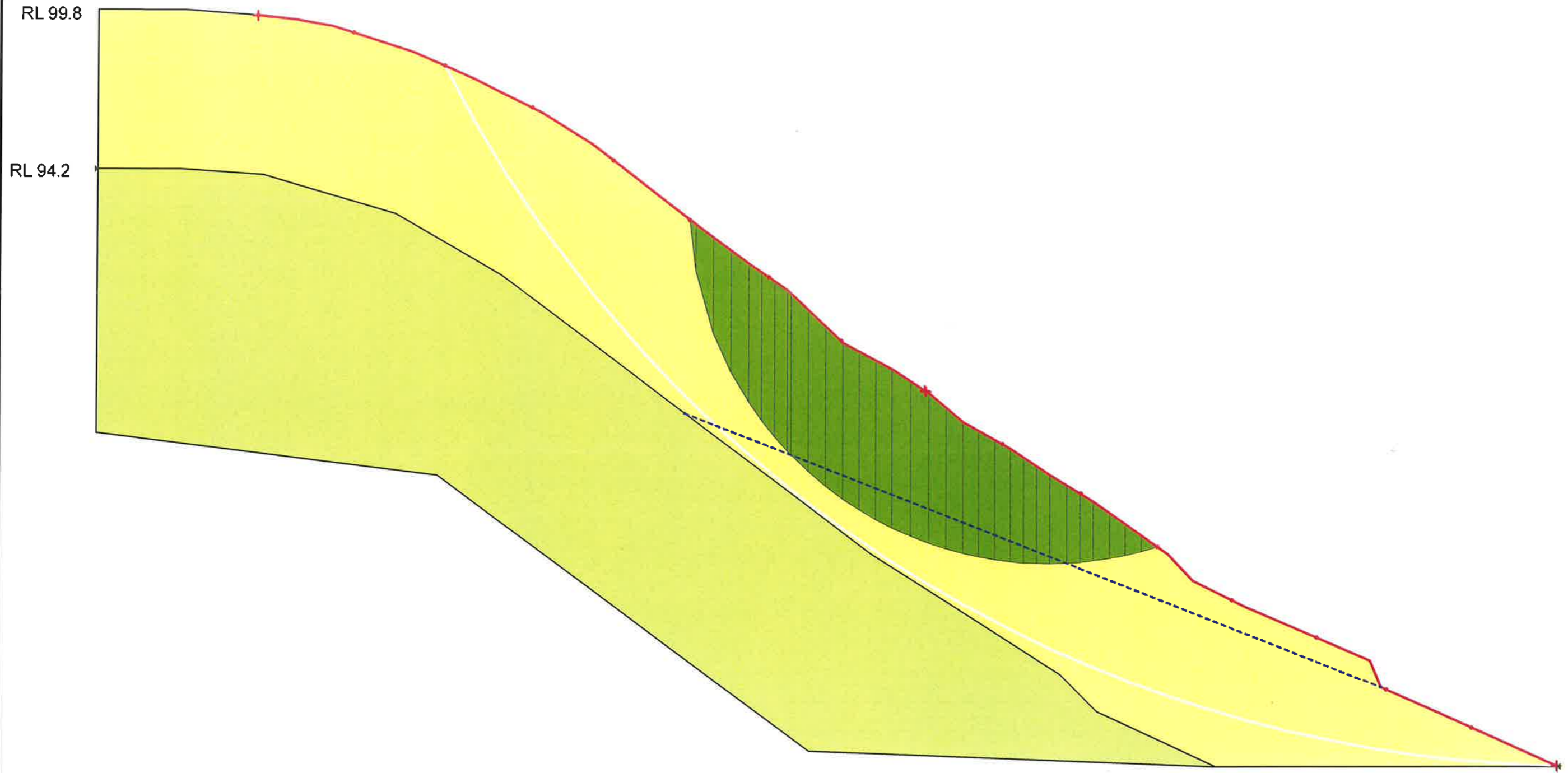


| | |
|---|-------|
| Slope Stability | |
| Gilson Cross section C-C (min values) Acceptable factor of safety.gsz | |
| 31/07/2023 | 1:150 |

| Color | Name | Slope Stability Material Model | Unit Weight (kNm ³) | Effective Cohesion (kPa) | Effective Friction Angle (°) |
|--------------|---------------------|--------------------------------|---------------------------------|--------------------------|------------------------------|
| Light Yellow | Clay/Silt | Mohr-Coulomb | 18 | 6 | 20 |
| Light Green | Semi-Weathered Rock | Mohr-Coulomb | 32 | 0 | 70 |

Factor of safety

0.674

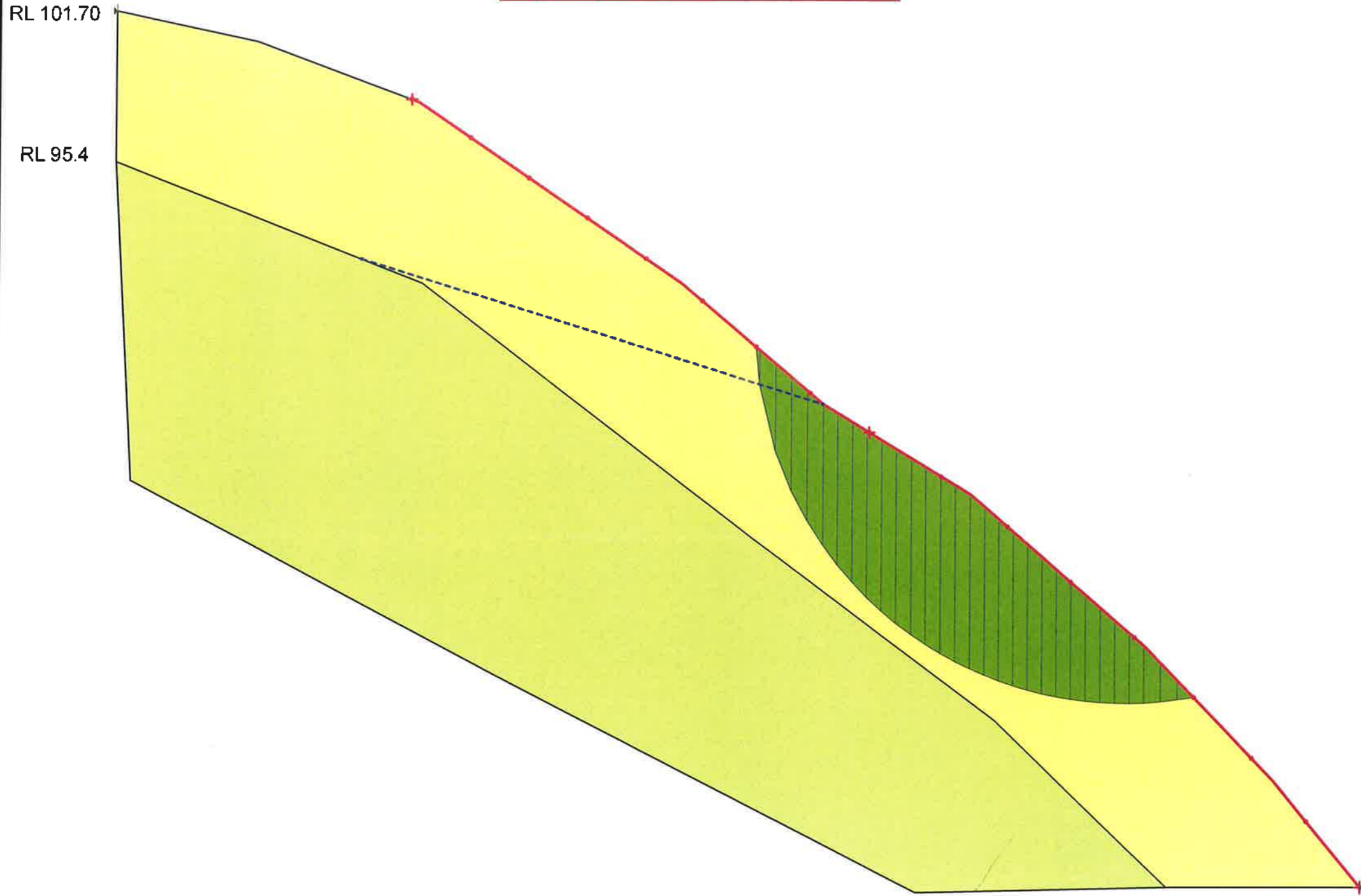


| | |
|--|-------|
| Slope Stability | |
| Gilson. Cross Section C-C (min values) high probability slip failure.gsz | |
| 31/07/2023 | 1:150 |

Factor of Safety

0.779

| Color | Name | Slope Stability Material Model | Unit Weight (kNm ³) | Effective Cohesion (kPa) | Effective Friction Angle (°) |
|-------------|---------------------|--------------------------------|---------------------------------|--------------------------|------------------------------|
| Yellow | Clay | Mohr-Coulomb | 18 | 8 | 20 |
| Light Green | Semi-Weathered rock | Mohr-Coulomb | 32 | 0 | 70 |

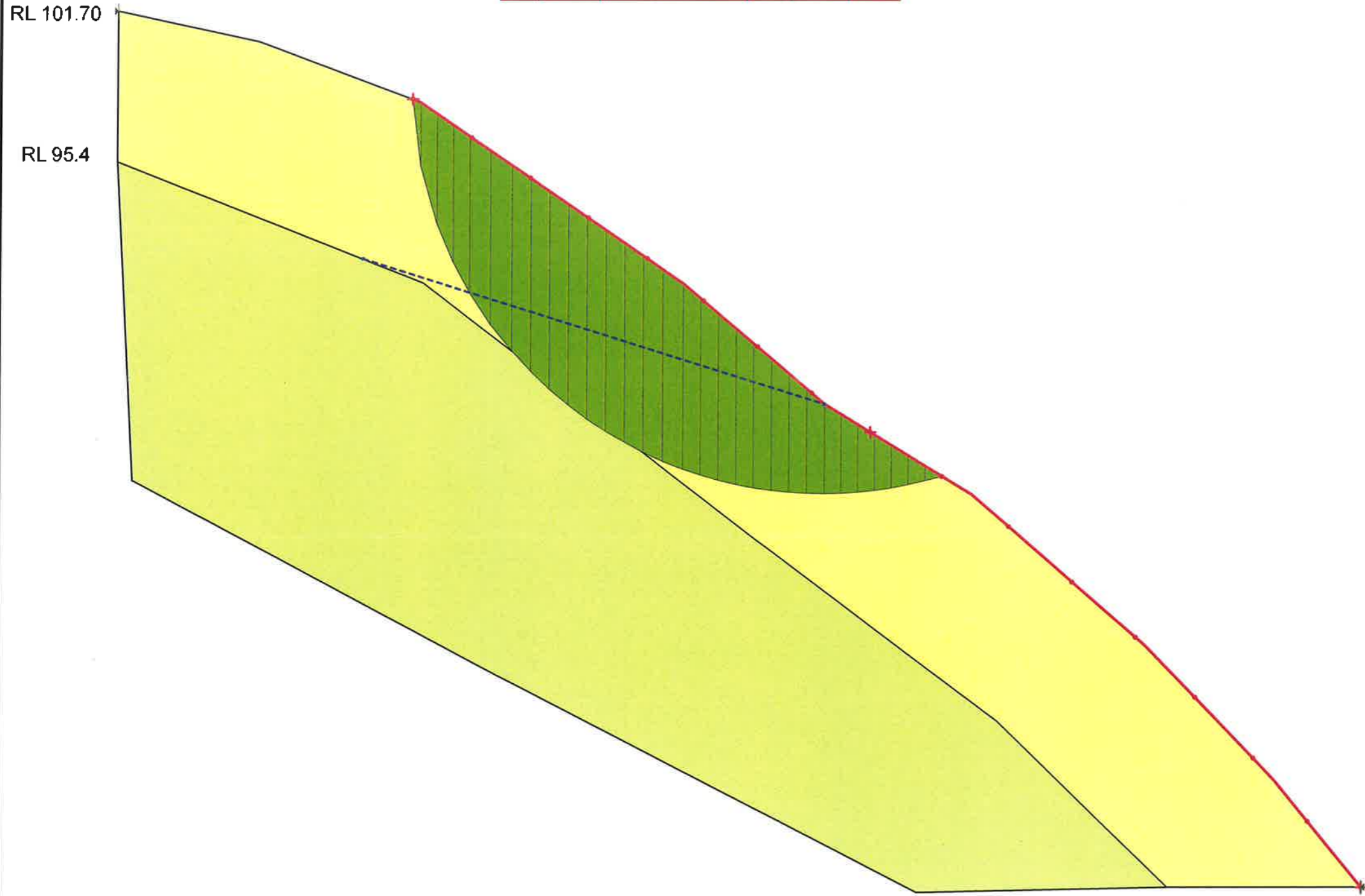


| |
|--|
| Slope Stability |
| Gilson Cross section D-D (min values) high probability of slip failure.gsz |
| 31/07/2023 |
| 1:200 |

Factor of Safety

1.590

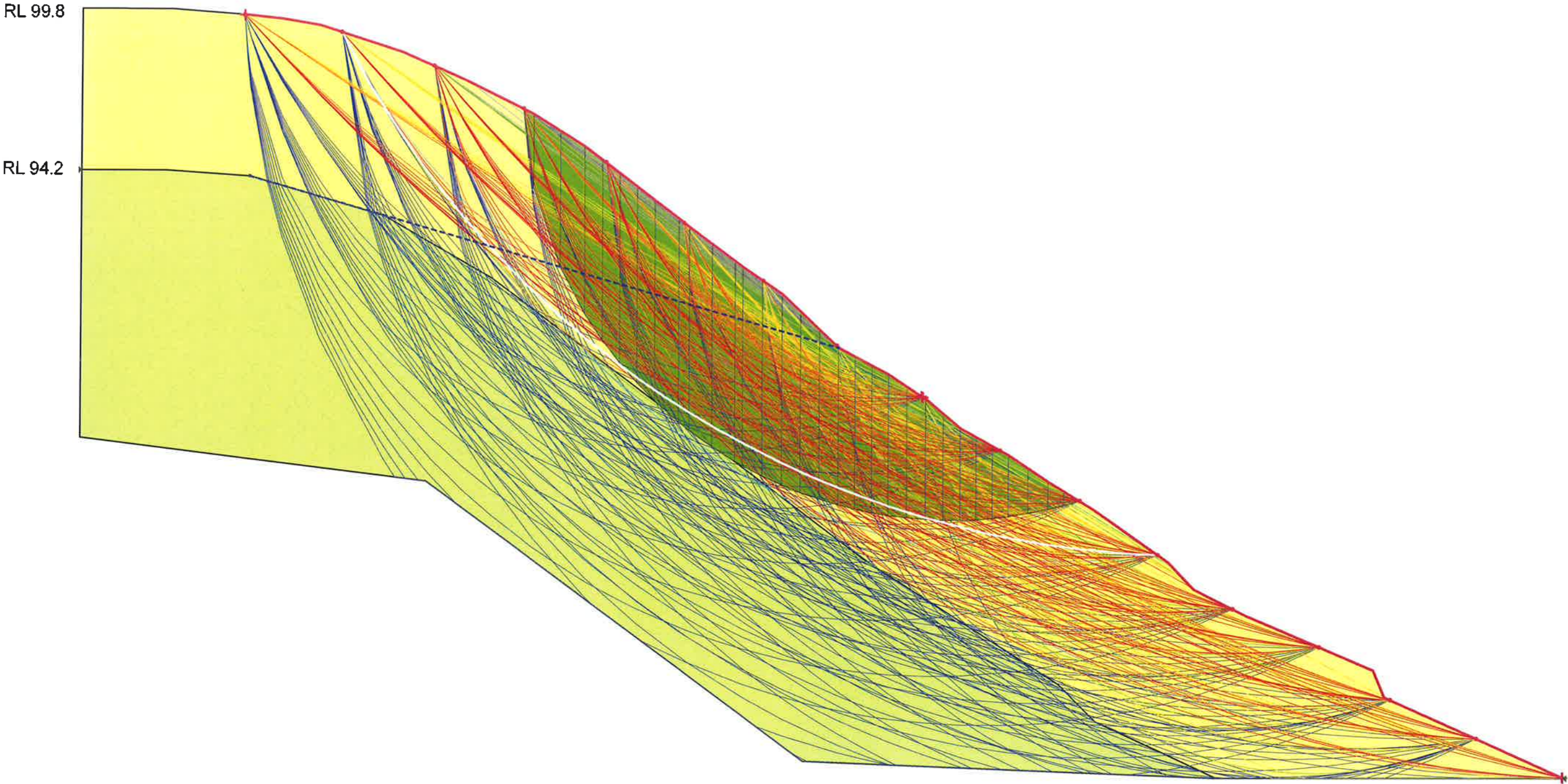
| Color | Name | Slope Stability Material Model | Unit Weight (kN/m ³) | Effective Cohesion (kPa) | Effective Friction Angle (°) |
|-------------|---------------------|--------------------------------|----------------------------------|--------------------------|------------------------------|
| Yellow | Clay | Mohr-Coulomb | 18 | 8 | 20 |
| Light Green | Semi Weathered rock | Mohr-Coulomb | 32 | 0 | 70 |



| | |
|---|-------|
| Slope Stability | |
| Gilson Cross section D-D (min values) Acceptable factor of safety.gsz | |
| 31/07/2023 | 1:200 |

Factor of Safety ● 0.935

| Color | Name | Slope Stability Material Model | Unit Weight (kNm ³) | Effective Cohesion (kPa) | Effective Friction Angle (°) |
|-------|---------------------|--------------------------------|---------------------------------|--------------------------|------------------------------|
| ■ | Clay/Silt | Mohr-Coulomb | 18 | 8 | 20 |
| ■ | Semi-Weathered Rock | Mohr-Coulomb | 32 | 0 | 70 |

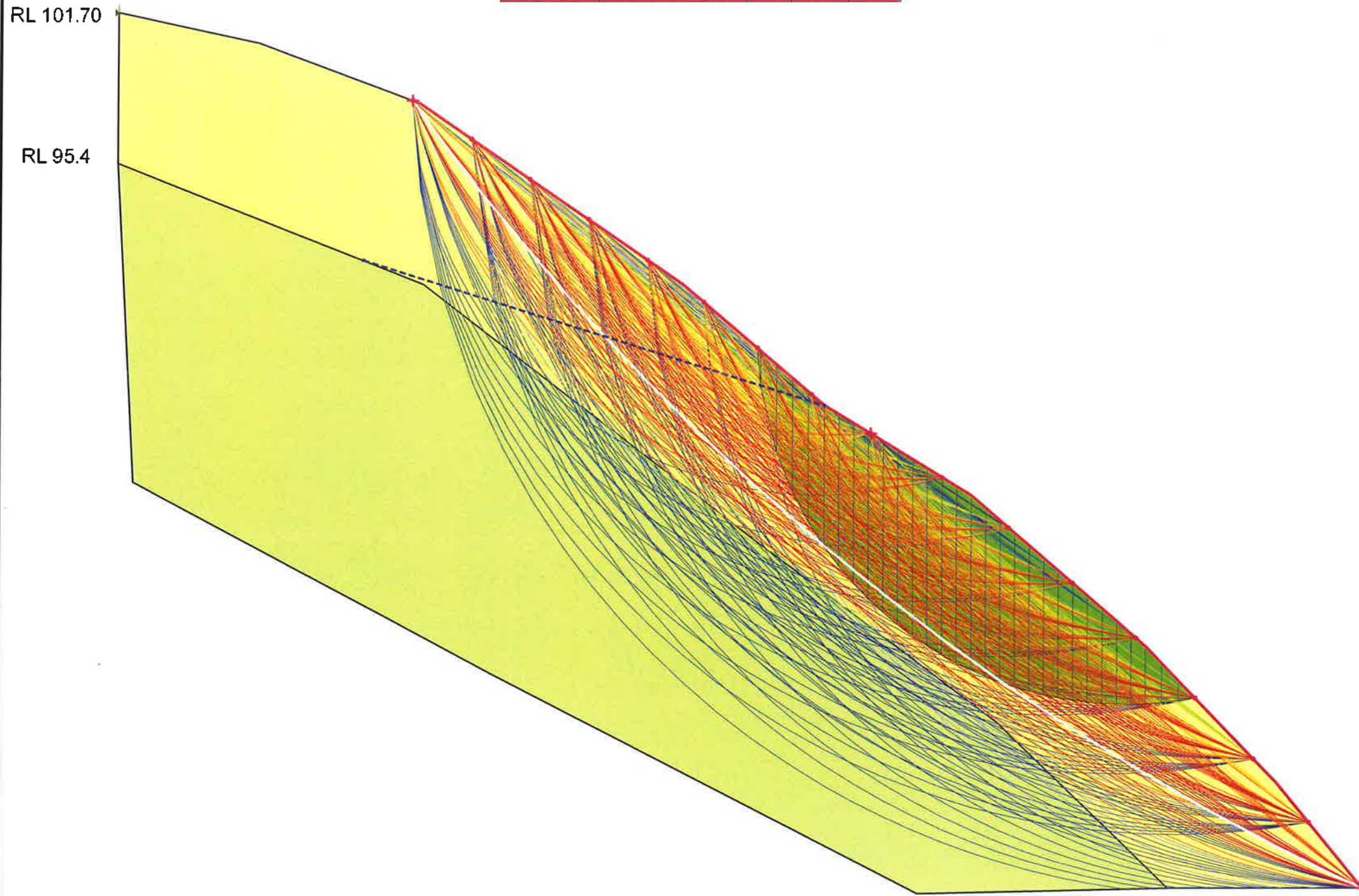


| | |
|---|-------|
| Slope Stability | |
| Gilson Cross section C-C (min values) Acceptable factor of safety.gsz | |
| 31/07/2023 | 1:150 |

Factor of Safety

0.779

| Color | Name | Slope Stability Material Model | Unit Weight (kN/m ³) | Effective Cohesion (kPa) | Effective Friction Angle (°) |
|-------------|---------------------|--------------------------------|----------------------------------|--------------------------|------------------------------|
| Yellow | Clay | Mohr-Coulomb | 18 | 8 | 20 |
| Light Green | Semi Weathered rock | Mohr-Coulomb | 32 | 0 | 70 |

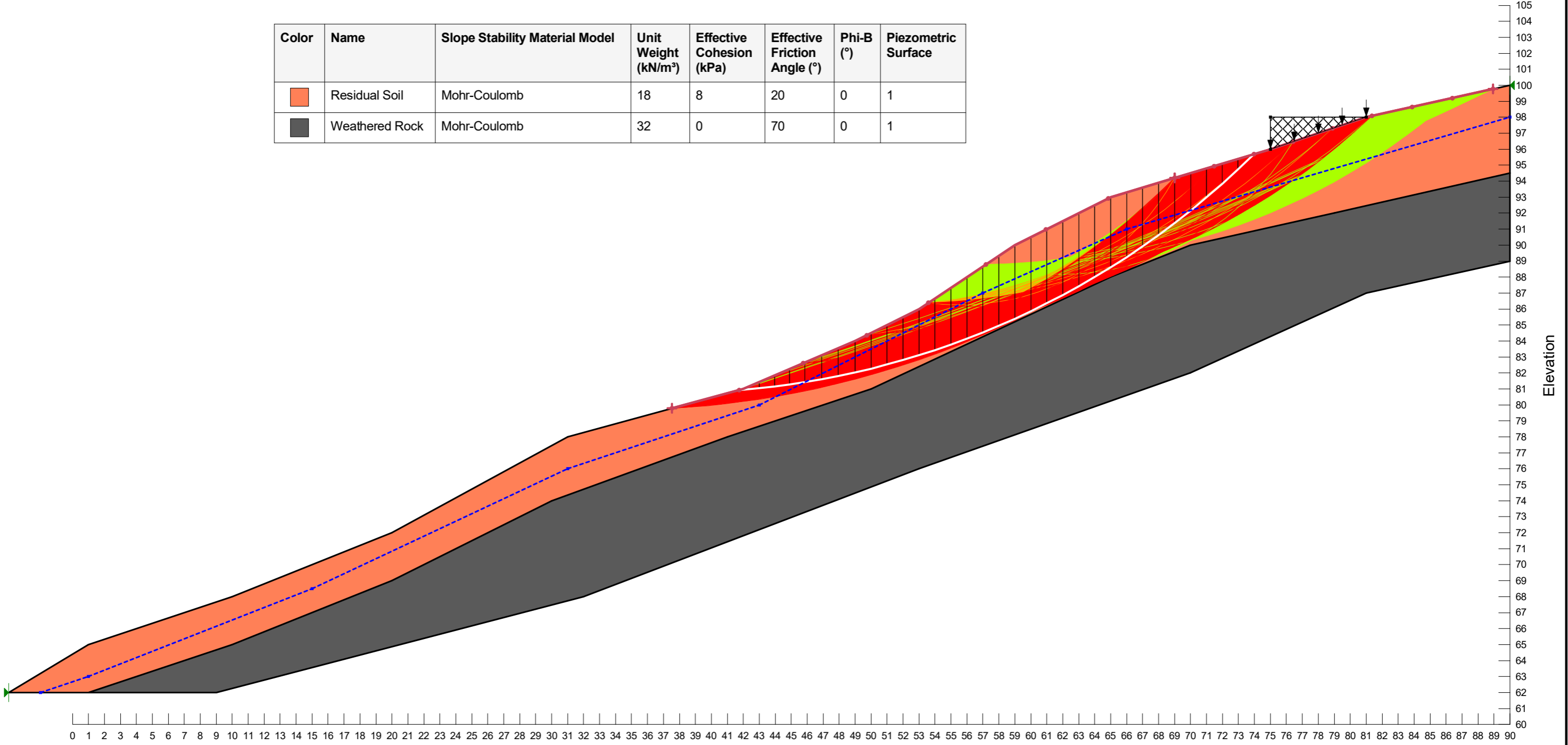


| |
|--|
| Slope Stability |
| Gilson Cross section D-D (min values) high probability of slip failure.gsz |
| 31/07/2023 |
| 1:200 |

| Factor of Safety | |
|------------------|-------------|
| 0.978 - 1.178 | Red |
| 1.178 - 1.378 | Orange |
| 1.378 - 1.578 | Yellow |
| 1.578 - 1.778 | Light Green |
| 1.778 - 1.978 | Green |
| 1.978 - 2.178 | Light Blue |
| ≥ 2.178 | Dark Blue |

| Color | Name | Slope Stability Material Model | Unit Weight (kN/m ³) | Effective Cohesion (kPa) | Effective Friction Angle (°) | Phi-B (°) | Piezometric Surface |
|--------|----------------|--------------------------------|----------------------------------|--------------------------|------------------------------|-----------|---------------------|
| Orange | Residual Soil | Mohr-Coulomb | 18 | 8 | 20 | 0 | 1 |
| Grey | Weathered Rock | Mohr-Coulomb | 32 | 0 | 70 | 0 | 1 |

0.978



| | |
|--------------------|-------|
| SLOPE/W Analysis | |
| Minor Dwelling.gsz | |
| 25/11/2024 | 1:252 |



CHARTERED PROFESSIONAL ENGINEERS

PROJECT:

**Geotechnical Report For
Michael Gilson & Joan McPhee**

PROJECT ADDRESS:

**Lot 4, Mataka Station,
Ranihoua Road**

LEGAL DESCRIPTION:

JOB NO:

23-038B

DATE:

Revision 0 - 19/12/2024

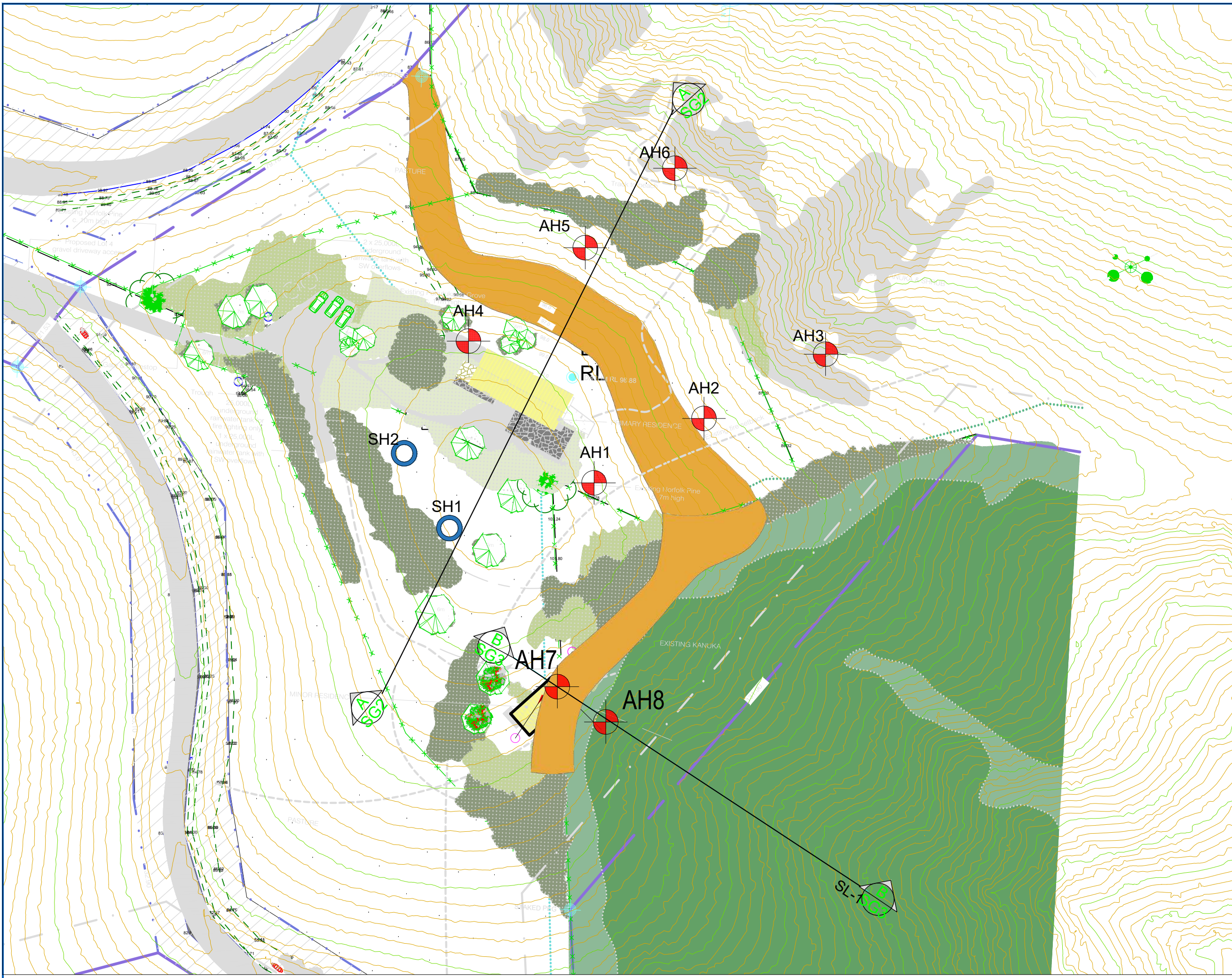
DRAWING INDEX:

| | |
|------|----------------------------|
| SG1 | SITE PLAN |
| SG2A | CROSS SECTION A-A |
| SG2B | CROSS SECTION A-A ENLARGED |
| SG3 | CROSS SECTION B-B |

A3

LEVEL 2
ANZ Bank Building
90 Kerikeri road,
P.O.Box 464
KERIKERI

Tel. (09) 4073255
Fax. (09) 4073256
E-mail. pk.engin@xtra.co.nz



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LEGEND



- AH1 Augerhole Location
- SH1 Soakage Test Location
- Cross section
- ZONE c - Stable Area
- ZONE B - Specific foundation required.
- ZONE A - Not suitable for foundations

PK ENGINEERING LIMITED
 DATE: 19 12 2024
 CHECKED BY: *[Signature]*
 PRADEEP KUMAR
 CHARTERED PROFESSIONAL ENGINEER
 (STRUCTURAL, GEOTECHNICAL)
 INPE, CPEng, MIPENZ No. 203058

| REV: | DESCRIPTION: | BY: | DATE: |
|---------|--------------------|-----|-------|
| STATUS: | ISSUED FOR CONSENT | | |



LEVEL 1, ANZ BANK
 90 KERIKERI ROAD, KERIKERI
 PO BOX 464, KERIKERI
 Phone Number: 09 407 3255
 Email: teampk@pkengin.co.nz

CLIENT: GILSONS, M & J

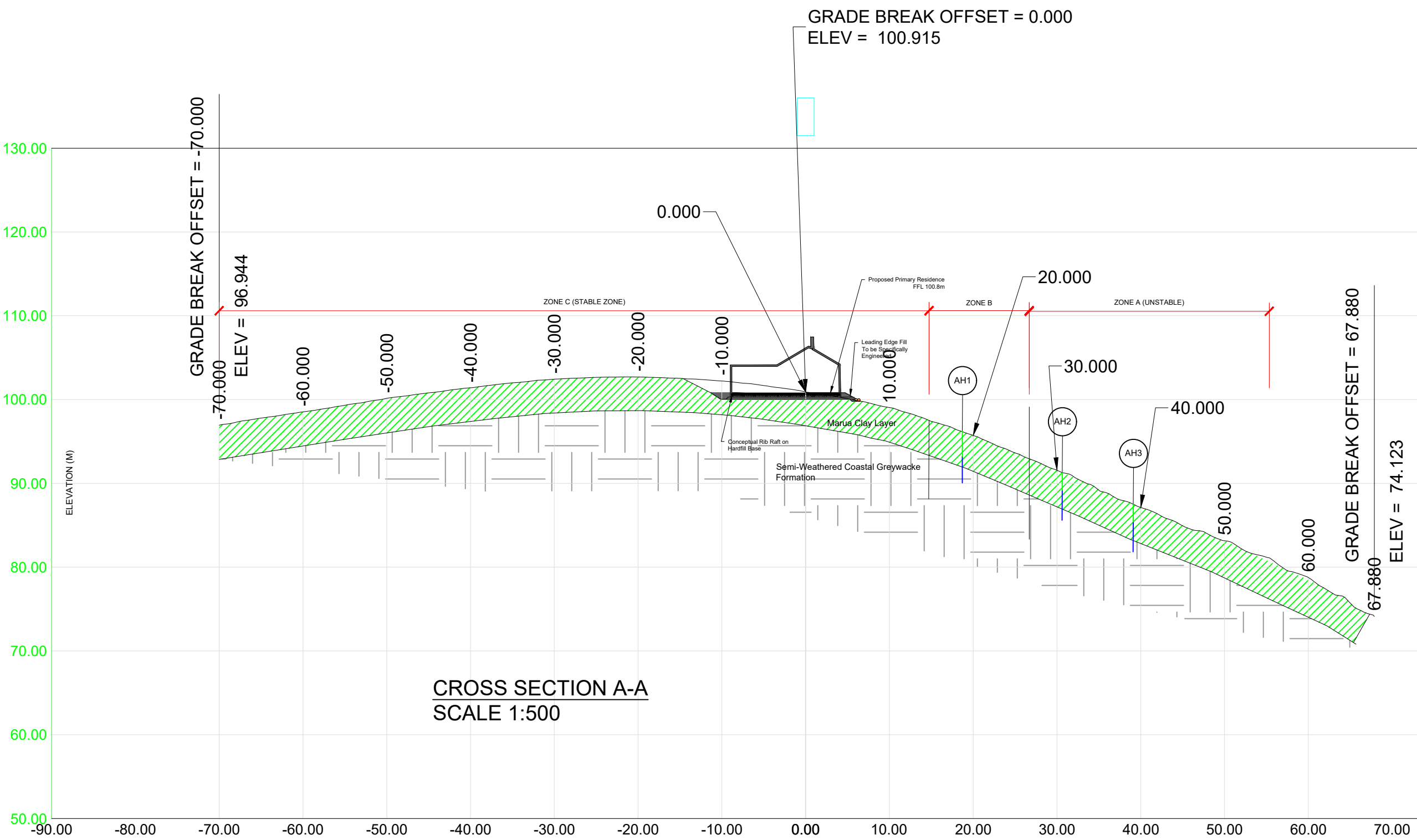
SITE: MATAKA STATION
 LOT 4 DP 323083

TITLE: GEOTECHNICAL
 SITE PLAN

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:750 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038B | A3/SG1 | 0 | |

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CROSS SECTION A-A
SCALE 1:500

PK ENGINEERING LIMITED
 DATE: 19 12 2024
 CHECKED BY: *[Signature]*
 PRADEEP KUMAR
 CHARTERED PROFESSIONAL ENGINEER
 (STRUCTURAL, GEOTECHNICAL)
 MPE, CPEng, MIPENZ No. 203058

| REV: | DESCRIPTION: | BY: | DATE: |
|----------------------------|--------------|-----|-------|
| STATUS: ISSUED FOR CONSENT | | | |



LEVEL 1, ANZ BANK
 90 KERIKERI ROAD, KERIKERI
 PO BOX 464, KERIKERI
 Phone Number: 09 407 3255
 Email: teampk@pkengin.co.nz

CLIENT: GILSONS, M & J

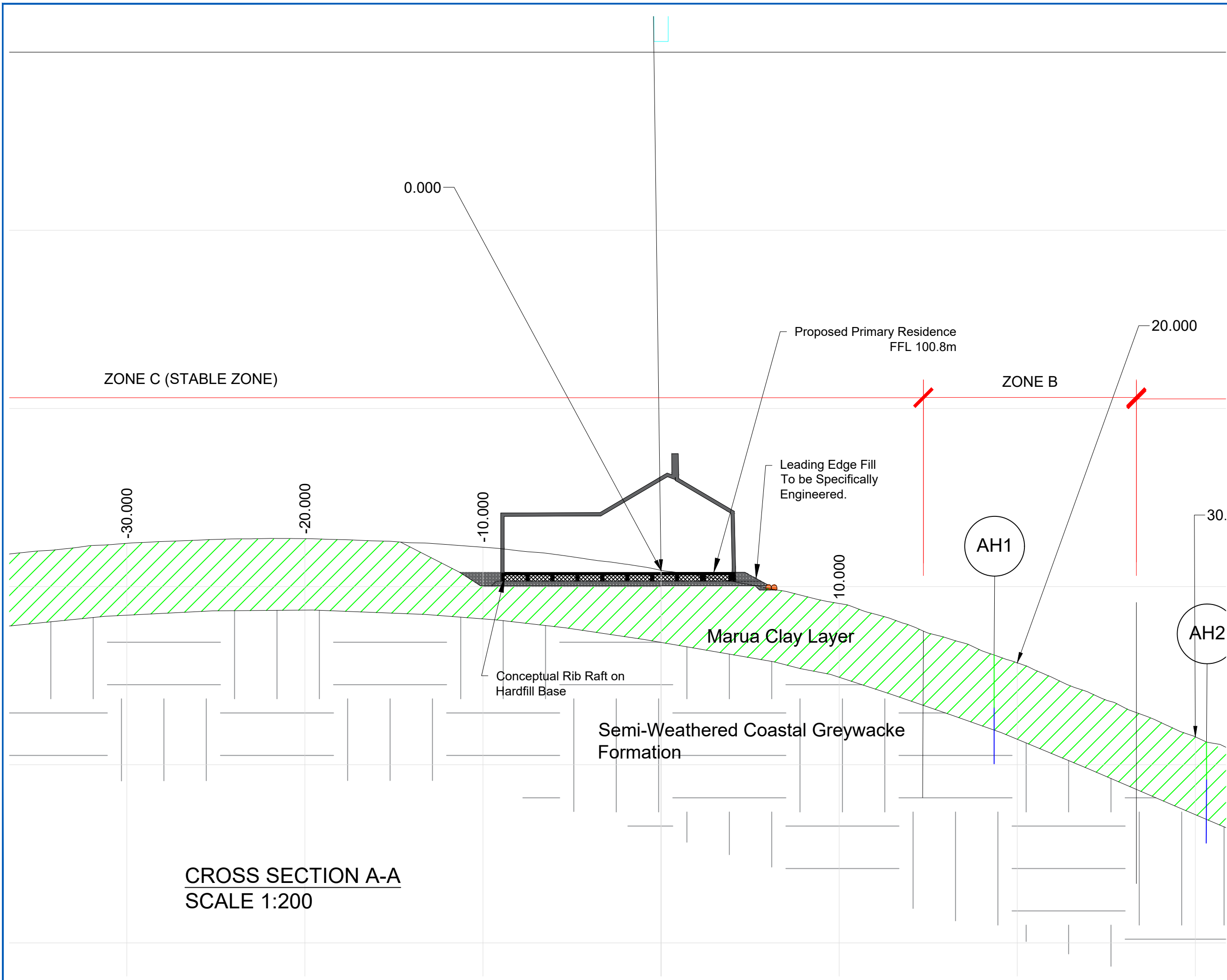
SITE: MATAKA STATION
 LOT 4 DP 323083

TITLE: GEOTECHNICAL
 CROSS SECTION A-A

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:500 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038B | A3/SG2A | 0 | |

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CROSS SECTION A-A
SCALE 1:200

PK ENGINEERING LIMITED
 DATE: 19 12 2024
 CHECKED BY: *[Signature]*
 PRADEEP KUMAR
 CHARTERED PROFESSIONAL ENGINEER
 (STRUCTURAL, GEOTECHNICAL)
 InPE, CPEng, MIPENZ No. 203058

| REV: | DESCRIPTION: | BY: | DATE: |
|----------------------------|--------------|-----|-------|
| STATUS: ISSUED FOR CONSENT | | | |

PK ENGINEERING
 LEVEL 1, ANZ BANK
 90 KERIKERI ROAD, KERIKERI
 PO BOX 464, KERIKERI
 Phone Number: 09 407 3255
 Email: teampk@pkengin.co.nz

CLIENT: GILSONS, M & J

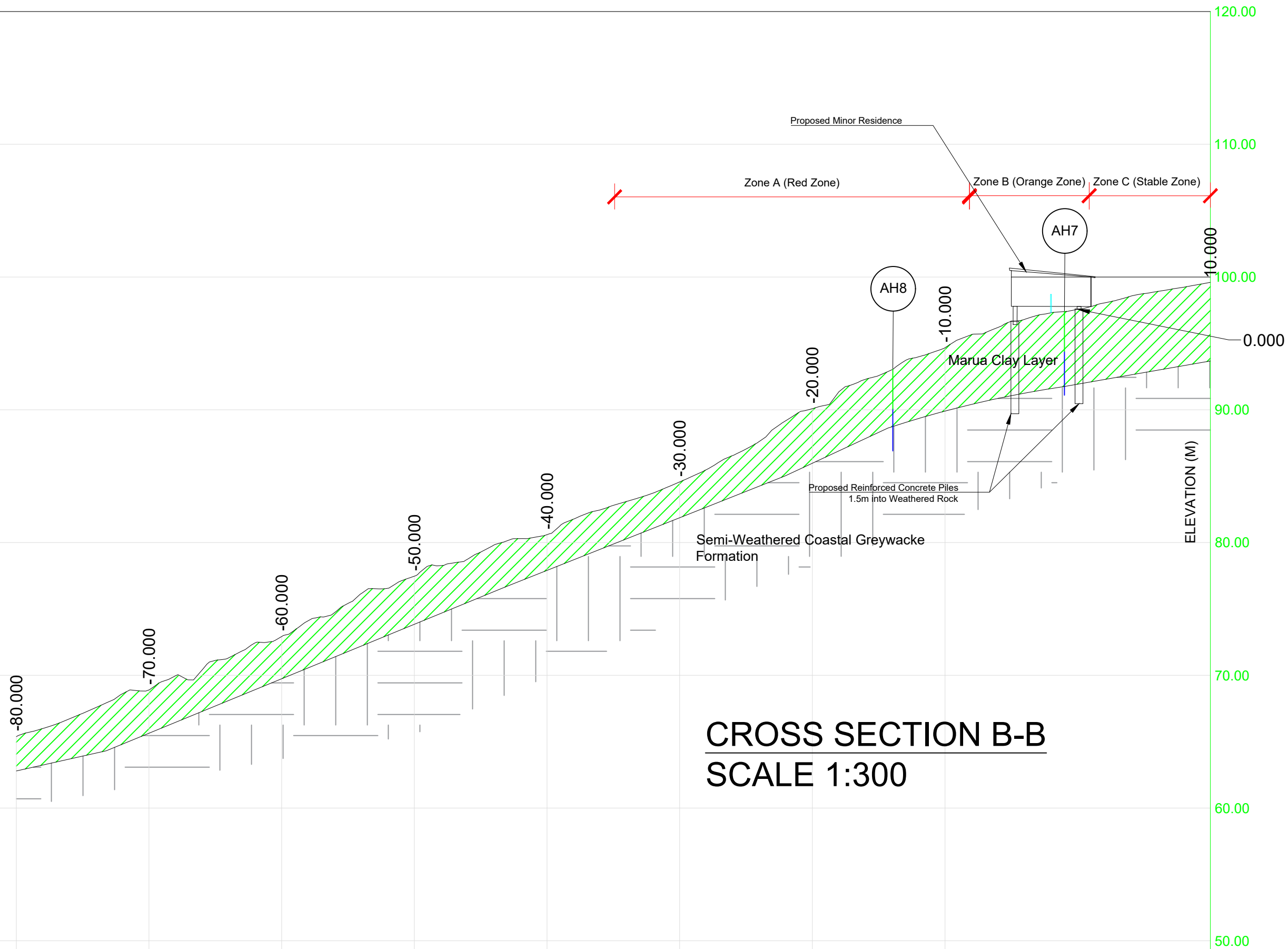
SITE: MATAKA STATION
 LOT 4 DP 323083

TITLE: GEOTECHNICAL
 CROSS SECTION A-A

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:200 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038B | A3/SG2B | 0 | |

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| REV: | DESCRIPTION: | BY: | DATE: |
|--------------------------|--------------|-----|-------|
| STATUS: ISSUED TO CLIENT | | | |

S:\Dropbox\data\CLIENTS\TEMPLATES\Admin\PK Engineering Logo.jpg

LEVEL 1, ANZ BANK
 90 KERIKERI ROAD, KERIKERI
 PO BOX 464, KERIKERI
 Phone Number: 09 407 3255
 Email: teampk@pkengin.co.nz

CLIENT: GILSON, M & J

SITE: MATAKA STATION
 LOT 4 DP 323083

TITLE: GEOTECHNICAL
 CROSS SECTION B-B

| | | | |
|-----------------------|-----------------------|----------------|----------------|
| SCALE AT A3: 1:300 | DATE: DEC 2024 | DRAWN: JW | CHECKED: PK |
| PROJECT NO: 23-38B | DRAWING NO: A3/SG3 | REVISION: 0 | |

Appendix B

PRODUCER STATEMENT

DESIGN: ON-SITE EFFLUENT DISPOSAL SYSTEMS (T.P.58)

ISSUED BY: Pradeep Kumar(approved qualified design professional)

TO: Michael Gilson & Joan Mcphee(owner)

TO BE SUPPLIED TO:Far North District Council.....

PROPERTY LOCATION: Mataka Station

LOT 4DP 323083 VALUATION NUMBER.....


TO PROVIDE : Design an on-site effluent disposal system in accordance with Technical paper 58 and provide a schedule to the owner for the systems maintenance.

THE DESIGN: Has been in accordance with G13 (Foul Water) G14 (Industrial Liquid Waste) B2 (durability 15 years) of the Building Regulations 1992.

As an independent approved design professional covered by a current policy of Professional Indemnity Insurance (Design) to a minimum value of \$200,000.00, I BELIEVE ON REASONABLE GROUNDS that subject to:

- (1) The site verification of the soil types.
- (2) All proprietary products met the performance requirements.

The proposed design will met the relevant provisions of the Building Code and 5.3.11 of The Far North District Council Engineering Standards.

(Signature of approved design professional)

B.E hons, NZCE, MIPENZ IntPE CPeng(Professional qualifications)

IPENZ No 203058(Licence Number or professional Registration number)

Type text here

Address Level1 ANZ bank building, 90 Kerikeri Road, Kerikeri
New Zealand

Phone Number 09 407 3255..
Fax Number
Cell Phone
Date 19/12/2024.....

Note: This form is to accompany every application for a Building Consent incorporating a T.P.58. Approval as a design professional is at Councils discretion.

On-site Wastewater Disposal Site Evaluation Investigation Checklist

FAR NORTH DISTRICT COUNCIL

Appendix E

TP58

On-site Wastewater Disposal Site Evaluation Investigation Checklist

Part A –Owners Details

1. Applicant Details:

| | | | |
|------------------------|------------------------------|------------------|---------|
| Applicant Name | Michael Gilson & Joan Mcphee | | |
| Company Name | N/A | | |
| | First Name(s) | | Surname |
| Property Owner Name(s) | Michael Joan | Gilson Mcphee | |

Nature of Applicant* Owner
*(*i.e. Owner, Leasee, Prospective Purchaser, Developer)*

2. Consultant / Site Evaluator Details:

| | | | |
|------------------------|----------------------|----------|---------|
| Consultant/Agent Name | PK Engineering Ltd | | |
| Site Evaluator Name | | | |
| Postal Address | PO BOX 464, Kerikeri | | |
| Phone Number | Business | 09403255 | Private |
| | Mobile | | Fax |
| Name of Contact Person | PK | | |
| E-mail Address | teampk@pkengin.co.nz | | |

3. Are there any previous existing discharge consents relating to this proposal or other waste discharge on this site?

| | | | | |
|--|--------------------------|----|-------------------------------------|---------------|
| Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> | (Please tick) |
| If yes, give Reference Numbers and Description | | | | |
| | | | | |
| | | | | |

4. List any other consent in relation to this proposal site and indicate whether or not they have been applied for or granted

If so, specify Application Details and Consent No.

(eg. LandUse, Water Take, Subdivision, Earthworks Stormwater Consent)

| |
|--|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

3. If a pump is being used, please provide the following information:

| | | |
|--------------------------|-----|----------|
| Total Design Head | TBC | (m) |
| Pump Chamber Volume | TBC | (Litres) |
| Emergency Storage Volume | TBC | (Litres) |

4. Please identify the type(s) of land disposal method proposed for this site: (please tick)
(Refer TP58 Sections 9 and 10)

| | | |
|--------------------------------|---|---------|
| Surface Dripper Irrigation | | |
| Sub-surface Dripper irrigation | ✓ | |
| Standard Trench | | |
| Deep Trench | | |
| Mound | | |
| Evapo-transpiration Beds | | |
| Other | | Specify |
| | | |

5. Please identify the loading rate you propose for the option selected in Part H, Section 4 above, stating the reasons for selecting this loading rate:

| | | |
|---------------|---------|------------------------------|
| Loading Rate | 3.5 | (Litres/m ² /day) |
| Disposal Area | Design | 571 (m ²) |
| | reserve | 171 (m ²) |

Explanation *(Refer TP58 Sections 9 and 10)*

Maximum occupancy of 10 persons utilising 200lts/day each, giving a total daily flow of 2,000lts/day. Using a conservative dosing rate of 3.5Litres/m²/day requires a 571m² area for the disposal field.

6. What is the available reserve wastewater disposal area *(Refer TP58 Table 5.3)*

| | |
|---|-----|
| Reserve Disposal Area (m ²) | 171 |
| Percentage of Primary Disposal Area (%) | 30% |

7. Please provide a detailed description of the design and dimensions of the disposal field and attach a detailed plan of the field relative to the property site:

Description and Dimensions of Disposal Field:

571 lineal meters of sub surface pressure compensating dripper irrigation lines with a line spacing of 1m and drippers at 1m centres. The lines to be laid on contour buried and covered as per Sheet S4 accompanying. dosing rate of 3.5l/m²/day

The area of the disposal field to be close planted with suitable plant species to provide evapotranspiration assist.

| | | | | | |
|----------------|-----|---|----|--|---------------|
| Plan Attached? | Yes | ✓ | No | | (Please tick) |
|----------------|-----|---|----|--|---------------|

If not, explain why not

| |
|--|
| |
| |
| |
| |

PART I: Maintenance & Management

(Refer TP58 Section 12.2)

1. Has a maintenance agreement been made with the treatment and disposal system suppliers?

| | | | | |
|-----|--|----|--|---------------|
| Yes | | No | | (Please tick) |
|-----|--|----|--|---------------|

Name of Suppliers

| |
|-----------------|
| To be confirmed |
|-----------------|

PART J: Assessment of Environmental Effects

1. Is an assessment of environmental effects (AEE) included with application?

(Refer TP58 section 5. Ensure all issues concerning potential effects addressed)

| | | | | |
|-----|--|----|-------------------------------------|---------------|
| Yes | | No | <input checked="" type="checkbox"/> | (Please tick) |
|-----|--|----|-------------------------------------|---------------|

If Yes, list and explain possible effects


PART K: Is Your Application Complete?

1. In order to provide a complete application you have remembered to:

| | |
|---|--|
| Fully Complete this Assessment Form | |
| Include a <i>Location Plan</i> and <i>Site Plan</i> (with Scale Bars) | |
| Attach an Assessment of Environmental Effects (AEE) | |

1. Declaration

I hereby certify that, to the best of knowledge and belief, the information given in this application is true and complete.

| | | | |
|----------|------------------------------------|-----------|---|
| Name | PRADEEP KUMAR | Signature |  |
| Position | B.E hons, NZCE, MIPENZ IntPE CPeng | Date | 19/12/2024 |

Note

Any alteration to the site plan or design after approval will result in non compliance.

Part B- Property Details

1. Property for which this application relates:

| | |
|--|---|
| Physical Address of Property | |
| | |
| Territorial Local Authority | FAR NORTH DISTRICT COUNCIL |
| Regional Council | NORTHLAND REGIONAL COUNCIL |
| Legal Status of Activity | Permitted: <input checked="" type="checkbox"/> Controlled: <input type="checkbox"/> Discretionary: <input type="checkbox"/> |
| Relevant Regional Rule(s) (Note 1) | C.6.1 - On-Site domestic wastewater discharge |
| Total Property Area (m ²) | 574,180 |
| Map Grid Reference of Property If Known | |

2. Legal description of land (as shown on Certificate of Title)

| | | | | | |
|-----------------|---|--------|--------|--------|--|
| Lot No. | 4 | DP No. | 323083 | CT No. | |
| | | | | | |
| | | | | | |
| Other (specify) | | | | | |

Please ensure copy of Certificate of Title is attached

PART C: Site Assessment - Surface Evaluation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation and Sn 5.2.2(a) Site Surface Evaluation)

Note: Underlined terms defined in Table 1, attached

Has a relevant property history study been conducted?

| | | | | |
|-----|--------------------------|----|-------------------------------------|-------------------|
| Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> | (Please tick one) |
|-----|--------------------------|----|-------------------------------------|-------------------|

If yes, please specify the findings of the history study, and if not please specify why this was not considered necessary.

| |
|------------------------------|
| Previously undeveloped site. |
| |
| |
| |
| |
| |
| |

1. Has a Slope Stability Assessment been carried out on the property?

| | | | | |
|-----|---|----|--|-------------|
| Yes | ✓ | No | | Please tick |
|-----|---|----|--|-------------|

If No, why not?

| |
|--|
| |
| |

If Yes, please give details of report (and if possible, please attach report):

| | |
|---|---|
| Author | Pradeep Kumar |
| Company/Agency | PK Engineering Ltd |
| Date of Report | 23-038 - Gilson Site Suitability Report |
| Brief Description of Report Findings:- Slope stability was carried out in order to determine the factors of safety, land within the areas proposed for wastewater discharge are | |
| have been considered relatively stable. | |
| | |

2. Site Characteristics (See Table 1 attached):

| |
|---|
| Provide descriptive details below: |
| Performance of Adjacent Systems: Not established. |
| |
| Estimated Rainfall and Seasonal Variation: |
| Information available from N.I.W.A MET RESEARCH |
| Annual Rainfall: 1800-2000mm |
| Vegetation / Tree Cover: |
| Area allocated for disposal is currently in pasture -but is planned to be in native vegetation |
| Refer to landscape plan (Chestchire Architects) |
| Slope Shape: (Please provide diagrams) |
| Moderately Sloping |
| |
| Slope Angle: |
| 4-15 Degrees |
| |
| Surface Water Drainage Characteristics: |
| No standing surface water near area allocated for disposal |
| |
| Flooding Potential: YES/NO NO |
| |
| If yes, specify relevant flood levels on appended site plan, I.e. one in 5 years and/or 20 year and/or 100 year return period flood level, relative to disposal area. |
| |
| Surface Water Separation: |
| 30m + |
| |
| |
| Site Characteristics: or any other limitation influencing factors |
| NIL |
| |

3. Site Geology**Check Rock Maps**

| |
|---|
| Rangiora Clay Loam/Marua Clay Loam overlying interbedded sandstone and siltstone (Greywacke/argillite) |
|---|

| |
|---------------------------------|
| Geological Map Reference Number |
|---------------------------------|

| |
|--------------|
| GNS Web Maps |
|--------------|

4. What Aspect(s) does the proposed disposal system face? (please tick)

| | | | |
|------------|--|------------|-------------------------------------|
| North | | West | <input checked="" type="checkbox"/> |
| North-West | | South-West | |
| North-East | | South-East | |
| East | | South | |

5. Site clearances, (Indicate on site plan where relevant)

| Separation Distance from | Treatment Separation Distance (m) | Disposal Field Separation Distance (m) |
|---|-----------------------------------|--|
| Boundaries | 1.5m | Check Council requirements |
| Surface water, rivers Creeks drains etc | 5-20m | 5-20m |
| Groundwater | 0.6m | 0.6m |
| Stands of Trees/Shrubs | N/A | |
| Wells, water bores | N/A | |
| Embankments/retaining walls | 3m | 3m |
| Buildings | 3m | 3m |
| Other (specify): | | |

PART D: Site Assessment - Subsoil Investigation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation, and Sn 5.2.2(a) Site Surface Evaluation and Sn 5.3 Subsurface Investigations)

Note: Underlined terms defined in Table 2, attached

1. Please identify the soil profile determination method:

| | | | |
|------------------|--|------------------|---|
| Test Pit | (Depth _____ m) | No of Test Pits | |
| Bore Hole | (Depth 2.0 m) | No of Bore Holes | 1 |
| Other (specify): | 8 other Boreholes on-site (2-3m Deep) | | |

Soil Report attached?

| | | | | |
|-----|-------------------------------------|----|--------------------------|-------------|
| Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> | Please tick |
|-----|-------------------------------------|----|--------------------------|-------------|

2. Was fill material intercepted during the subsoil investigation?

| | | | | |
|-----|--------------------------|----|-------------------------------------|-------------|
| Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> | Please tick |
|-----|--------------------------|----|-------------------------------------|-------------|

If yes, please specify the effect of the fill on wastewater disposal

| |
|--|
| |
| |
| |

3. percolation testing (mandatory and site specific for trenches in soil type 4 to 7)

Please specify the method

As per TP58 Guidelines for Percolation tests

| | | | | | |
|-----------------------|-----|-------------------------------------|----|--------------------------|-------------|
| Test Report Attached? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> | Please tick |
|-----------------------|-----|-------------------------------------|----|--------------------------|-------------|

4. Are surface water interception/diversion drains required?

| | | | | |
|-----|-------------------------------------|----|--------------------------|-------------|
| Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> | Please tick |
|-----|-------------------------------------|----|--------------------------|-------------|

If yes, please show on site plan

4a Are subsurface drains required No

If yes enter details

5. Please state the depth of the seasonal water table:

| | | | | | | |
|--------|-----|---|----------|--------------------------|-----------|-------------------------------------|
| Winter | 3m+ | m | Measured | <input type="checkbox"/> | Estimated | <input checked="" type="checkbox"/> |
| Summer | 3m+ | m | Measured | <input type="checkbox"/> | Estimated | <input checked="" type="checkbox"/> |

6. Are there any potential storm water short circuit paths?

| | | | | | |
|-----|--------------------------|----|-------------------------------------|--------------------------|-------------|
| Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Please tick |
|-----|--------------------------|----|-------------------------------------|--------------------------|-------------|

If the answer is yes, please explain how these have been addressed

| |
|--|
| |
| |
| |

7. Based on results of subsoil investigation above, please indicate the disposal field soil category (Refer TP58 Table 5.1)

| | |
|---------------------|---------------------------|
| Is Topsoil Present? | If so, Topsoil Depth? (m) |
|---------------------|---------------------------|

| Soil Category | Description | Drainage | Tick One |
|---------------|--|---------------------------|-------------------------------------|
| 1 | Gravel, coarse sand | Rapid draining | <input type="checkbox"/> |
| 2 | Coarse to medium sand | Free draining | <input type="checkbox"/> |
| 3 | Medium-fine & loamy sand | Good drainage | <input type="checkbox"/> |
| 4 | Sandy loam, loam & silt loam | Moderate drainage | <input type="checkbox"/> |
| 5 | Sandy clay-loam, clay loam & silty clay-loam | Moderate to slow drainage | <input checked="" type="checkbox"/> |
| 6 | Sandy clay, non-swelling clay & silty clay | Slow draining | <input type="checkbox"/> |
| 7 | Swelling clay, grey clay, hardpan | Poorly or non-draining | <input type="checkbox"/> |

Reasons for placing in stated category

| |
|---|
| Soakage test results. NRC Northland soil fact sheets indicate moderate drainage for the soil type |
| |
| |
| |

PART E: Discharge Details

1. Water supply source for the property (please tick):

| | |
|-----------------------------|-------------------------------------|
| Rainwater (roof collection) | <input checked="" type="checkbox"/> |
| Bore/well | <input type="checkbox"/> |
| Public supply | <input type="checkbox"/> |

2. Calculate the maximum daily volume of wastewater to be discharged, unless accurate water meter readings are available

(Refer TP58 Table 6.1 and 6.2)

| | | | | |
|-----------------------------------|----------------|-----|-----|---|
| Number of Bedrooms | 2 - 3 - 4 | | | |
| Design Occupancy | 12 max | | | (Number of People) Intermittant occupancy |
| Per capita Wastewater Production | 140 | 160 | 180 | (tick) (Litres per person per day) |
| Other - specify | 200 | 220 | | |
| | | | | |
| Total Daily Wastewater Production | | | | (litres per day) |

3. Do any special conditions apply regarding water saving devices

| | | | | | |
|-------------------------------------|-----|---|----|-------------------------------------|---------------|
| a) Full Water Conservation Devices? | Yes | | No | <input checked="" type="checkbox"/> | (Please tick) |
| b) Water Recycling - what %? | 0 | % | | | (Please tick) |

If you have answered yes, please state what conditions apply and include the estimated reduction in water usage

| |
|--|
| |
| |
| |
| |

4. Is Daily Wastewater Discharge Volume more than 2000 litres:

| | | |
|-----|-------------------------------------|---------------|
| Yes | | (Please tick) |
| No | <input checked="" type="checkbox"/> | (Please tick) |

Note if answer to the above is yes, an N.R.C wastewater discharge permit may be required

5. Gross Lot Area to Discharge Ratio:

| | | |
|-----------------------------------|---------|------------------------------|
| Gross Lot Area | 574,180 | M2 |
| Total Daily Wastewater Production | 1920lts | (Litres per day)(from above) |
| Lot Area to Discharge Ratio | 299 | |

7. Does this proposal comply with the Northland Regional Council Gross Lot Area to Discharge Ratio of greater than 3?

| | | | | |
|-----|-------------------------------------|----|--------------------------|-------------|
| Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> | Please tick |
|-----|-------------------------------------|----|--------------------------|-------------|

8. Is a Northland Regional Council Discharge Consent Required?

| | | | | |
|-----|--------------------------|----|-------------------------------------|---------------|
| Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> | (Please tick) |
|-----|--------------------------|----|-------------------------------------|---------------|

PART F: Primary Treatment (Refer TP58 Section 7.2)

1. Please indicate below the no. and capacity (litres) of all septic tanks including type (single/dual chamber grease traps) to be installed or currently existing: If not 4500 litre, dual chamber explain why not

| Number of Tanks | Type of Tank | Capacity of Tank (Litres) |
|-----------------|----------------|---------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | Total Capacity | |

2. Type of Septic Tank Outlet Filter to be installed?

PART G: Secondary and Tertiary Treatment

(Refer TP58 Section 7.3, 7.4, 7.5 and 7.6)

1. Please indicate the type of additional treatment, if any, proposed to be installed in the system: (please tick)

| | | |
|------------------------------|-------------------------------------|------------------------------|
| Secondary Treatment | <input checked="" type="checkbox"/> | |
| Home aeration plant | <input checked="" type="checkbox"/> | |
| Commercial aeration plant | <input type="checkbox"/> | |
| Intermediate sand filter | <input type="checkbox"/> | |
| Recirculating sand filter | <input type="checkbox"/> | |
| Recirculating textile filter | <input type="checkbox"/> | |
| Clarification tank | <input type="checkbox"/> | |
| Tertiary Treatment | <input type="checkbox"/> | |
| Ultraviolet disinfection | <input type="checkbox"/> | |
| Chlorination | <input type="checkbox"/> | |
| Other | <input type="checkbox"/> | Specify <input type="text"/> |

PART H: Land Disposal Method

(Refer TP58 Section 8)

1. Please indicate the proposed loading method: (please tick)

| | |
|---------------|-------------------------------------|
| Gravity | <input type="checkbox"/> |
| Dosing Siphon | <input checked="" type="checkbox"/> |
| Pump | <input checked="" type="checkbox"/> |

Siphon or pump to be confirmed on site

2.High water level alarm to be installed in pump chambers

Yes no

If not to be installed, explain why

| |
|--|
| |
| |
| |

Plant Species

Astelia grandis

Wide olive green leaves with a silvery sheen beneath and reddish purple midribs, the clump can be up to 2m high. It is an inhabitant of swampy ground from lowland to montane altitudes throughout the North Island and to Southern Canterbury. Preferring a damp soil, it is able to withstand permanently wet feet.

1.5-2m

Alocasia nigrescens (Black Taro)

Large black green blunt arrow shaped leaves on dark purple stalks from loose clumps in damp part shaded areas.

0.5/0.5m

Apodasmia similis (Oioi)

An extremely elegant native reed with blueish green foliage with brownly bract at the joins. Grows up to 1m and has a creeping rhizome. Thrives in marshlands and estuaries. Will grow in most conditions. Is very hardy.

1.5/2.0m

Arthropodium Cirratum (Rengarenga Lily)

An attractive perennial plant, known as the Rengarenga Lily. A clump forming plant with drooping fleshy strap leaves. Masses of white starry flower heads throughout summer. It can grow in a wide range of conditions, including coastal and shade. Will not tolerate severe frosting.

1.0/1.0m

Blechnum Novae Zealandiae

An attractive creeping fern with drooping fronds. New growth is always reddish. An easy to grow fern which looks most attractive when grown on a bank, or as a ground cover, provided there is ample moisture.

0.8-1m

Carex Dispacea

This sedge is densely tufted. The narrow leaves are light green and make an attractive contrast to darker foliage. In the garden it should have a sunny or semi-shaded site. Prefers damp conditions.

0.7/0.6m

Carex dissita

An attractive sedge with an arching habit. The ribbed leaves are a fresh bright green and contrast with the very dark seed heads that are carried on the stems. It can be grown in quite shady areas, such as under trees, or in an open situation, but it requires a moist soil.

0.7/0.7m

Carex maorica

This sedge grows into upright clumps with ribbed light green leaves. The foliage is fragile and can snap easily making it an unattractive garden specimen. It is best suited to environmental plantings.

0.7/0.6m

Carex secta

This is a common plant of swampy areas throughout New Zealand. It forms large tussocks with weeping yellowish green leaves. At its best beside water, it will grow in any moist soil in sun or semi-shade. Old specimens in moist to wet sites often form thick sturdy trunks from the matted roots and old stem bases.

1.0/0.6m

Carex tenuiculmis

This species is a common plant of swampy areas it is of a reddish bronze colour and is at its best beside water. It will grow in any moist soil in the sun or semi-shade. This species does not form a trunk.

0.7/0.6m

Carex virgata

A vigorous sedge that has narrow arching bright green leaves. It is a useful species for waterside planting and very damp soils but will also grow on dry sites and in sun or semi-shade.

0.7/0.6m

Carpodetus serratus (Marble leaf)

An attractive tree with upright spreading branches, found throughout New Zealand on forest margins and stream banks. The juvenile form has tangled growth.

3-5m

Cordyline australis (Cabbage Tree)

One of NZs best known and most distinctive plants. The young tree has long narrow, mid green leaves which arise directly from a single trunk, having an effect similar to ornamental grasses. The creamy and fragrant flowers are a stunning feature, appearing in large densely packed panicles during late spring and summer. An excellent plant for landscaping, being suitable for group and specimen planting.

7.5/2.0m

Cordyline Midnight Star

A variety of the red or maroon Cabbage Tree. A good selection for a visual impact within the garden.

7.5/2.0m

Cortaderia fulvida (Toi toi)

This is one of the smaller toetoe, with a height of 1.5 – 2.5m when flowering. The blueish green leaves are shiny beneath and up to 4 cm wide and 2m long. Its golden flower plumes sometimes have a pinkish tinge.

2.0/2.0m

Coprosma Rugosa

A tough colourful and interesting alpine shrub with very tangled bright orange new growth. Bears berries attractive to birds. Can be clipped into an interesting hedge or allowed to grow freely will become a medium sized shrub.

1.5-3m

Coprosma Grandfolia

It is a good coloniser or shelter species tolerating a wide range of soils, and shade to full sun. Its clusters of orange/red fruits are attractive to birds, though to have fruits you may need to grow several, as coprosma plants bear flowers of only one sex. Flowers appear in late autumn and winter, and are pale but quite conspicuous.

up to 6m

Cyperus ustulus

This is a plant of damper areas. It is very vigorous, growing into a clump with deep olive-green, very sharp edged leaves. The flowering stems are up to 1.2 m or more, with a ruff of leafy bracts below the spikelets. A useful plant for revegetation in wet areas, but it is generally considered too vigorous for most garden situations.

0.8/1.2m

Dianella King Alfred

An attractive form of Dianella. This selected form has an ability to survive a wide range of conditions. It has a small flax like appearance.

0.8/0.6m

Dianella nigra

This is a hardy tufted plant resembling a small fine leaved flax. It grows to about 60cm high and bears insignificant flowers from late spring to summer. These are followed by the plants most ornamental feature, its berries. In the best form these are a glossy dark blue, but can vary to quite pale colours. Grows in sun or semi-shade and in a range of soil conditions. Looks good planted as a ground cover.

0.6/0.6m

Elatostema Rugosum

Naturally inhabiting damp shady streamsides and gullies; it has dark stems with pinnate leaves that are rough and wrinkled and have serrated margins.

The leaves are dark bronzy green with purple tonings. An interesting foliage plant that makes a very good groundcover for a wet shady position.

0.5-1m

Fuchsia Excorticata

The largest *Fuchsia* in the world. A small tree with stunning orange-brown papery bark and interesting twisted shape. Purple-red flowers early spring to summer. The edible fleshy Konini fruit from January to March is sweet and tasty. It was made into jams and desserts by early settlers.

Attractive to bees. Prefers a moist soil. Deciduous. Hardy.

5m

Hebe Stricta

Hebe stricta is an open branching shrub found throughout New Zealand. Its long narrow leaves are deep green and glossy. The white mauve-tinged flowers appear on 7-15cm spikes during summer. Pruning is important to maintain a good shape. It is also a hardy landscape plant. Depth of colour and handsome foliage places this hebe in a class of its own.

1-3m

Juncus Gregiflorus

A rush of swampy areas throughout New Zealand. It grows into a tight clump 1-2m tall with bright green stems. It is ideal for revegetation of wetlands and riparian areas and is useful for damp landscaping areas.

1-2m

Leptospermum Burgundy Queen (Flowering Ti Tree)

Exquisite double flowers of deep burgundy red late winter and spring, Dark reddish bronze foliage.

2.0/1.5m

Libertia Grandiflora

Larger flowered species found in damp situations. Brownish green linear leaves to 90x1.5cm tapering to a point. Attractive white 3-5 cm flowers with olive or bronze keel are carried on 90cm lightly branched stems in early summer, followed in autumn by decorative golden brown seed capsules.

0.9/0.7m

Leptospermum scoparium

It is a primary species which provides a natural habitat that allows other New Zealand native species to become established. It naturally dies out after 20-25 years. It is often found growing at the margins of a mature forest. Manuka has small narrow sharply pointed dark green leaves, and bears masses of small white or pale pink flowers from spring into early summer. It is tolerant of practically any conditions and is used in most revegetation projects nation wide.

4-8m

Libertia peregrinans

Simple but interesting plant. Sword like leaves to 25-30cm, brownish green or khaki with well defined orange yellow midrib, tapering to a sharp point, arranged in fans. The plant is sustained by underground rhizomes from which new fans of leaves appear. Small white 3 peatled flowers on short stems in spring, followed by bronze yellow capsules.

0.3/1.0m

Melicytus Ramiflorus

The pointed oval leaves are a bright green, with fresh growth being quite soft and an even brighter green. The bark is grayish white and becomes attractively mottled with lichens. The tiny flowers are produced abundantly in spring and are followed by numerous purple black berries.

5m

Phormium Tenax

The foliage is khaki green coloured and up to 3m long. The nectar from the flowers, borne on tall slender flower stalks, is a great attractor to native birds such as Tui. Harakeke is abundant throughout New Zealand particularly in wetland areas. Perfect for revegetation, riparian plantings, and for landscaping.

2-3m

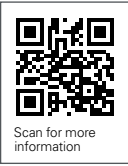
Phormium Surfer

Flax. An excellent compact dwarf clump forming perennial, producing olive green weeping leaves with bronze margins. Excellent all round garden specimen growing anywhere from dry to damp conditions. Withstands strong coastal winds and is frost hardy. Use in mass landscape with other natives.

0.5/0.5m

Schefflera Digitata

The large deep green, rather soft leaves are composed of up to 9 oval leaflets arising from a single point. They get progressively bigger as they radiate outwards, with the biggest leaflet being up to 20cm. The margins are finely serrated and tinged with pinkish red, as are the veins and midribs. Large panicles of tiny greenish white flowers hang below the leaves in summer and are followed by white to purple berries. Pate should be given a shady and sheltered position in good moist soil. Could be used to good effect in a tropical planting or as a background plant.



X-Perco®

Passive Wastewater Treatment

Technical Guide WW 1

With already 3000 installations across the world, X-Perco is the new revolution in wastewater treatment.



05.20 | WASTEWATER | WW01 X-PERCO

Applications

- Residential and Holiday Homes
- Small communities
- Schools
- Camping grounds

Product Attributes

- Single tank installation
- Passive Gravity Filtration
- No electricity required for treatment process
- Ecological and sustainable
- Discrete low visual impact
- 100% natural Xylit filtration

Robust, durable & self compacting concrete construction

Flexible disposal applications

Quality Standards

PIA Quality Tested (Germany)

We are the supply partner of choice for New Zealand's civil construction industry, specialising in water and infrastructure based solutions.



With already 3000 installations across the world, X-Perco is the new revolution in wastewater treatment.

The X-Perco, a passive innovative design by Eloy Water (Belgium). Performance with little or no power, and unrivaled robustness. Designed to handle the fluctuations of permanent or intermittent occupancy, the X Perco system is the recommended solution for a home, holiday house or commercial application.

Four unique qualities

- Natural, passive, durable and high strength activated carbon filtration
- Powerless high performance treatment
- Single Tank - Robust and lightweight concrete
- Water distribution is through a patented rotating Aquacan to a pipe network equally supplying the filter media

Xylit (Activated Carbon) - A 100% ecological and sustainable media

Naturally formed over millions of years, Xylit is a source of activated carbon comprised of natural wood fiber extracted from the ground. Xylit is derived from Lignite, harvested and graded in Germany under patent.

The Xylit filtering media boasts many unique properties:

- High strength fibre which retains its integrity and guarantees an excellent service life. (10 Year guarantee)
- Large surface area that fosters the development of a dense bacterial biofilm, occurring more rapidly than with any other filtering media
- Simple to maintain
- Compostable

Designing

The Xylit offers very reliable treatment, especially during fluctuating or infrequent occupancy. Ideal for holiday homes.

The natural properties of the Xylit maintains biological activity for long periods without intervention. The unique potential of the Xylit makes the X-Perco a dependable choice for sustainable wastewater treatment.



FIG. 1 Xylit



FIG. 2 Drip irrigation pipe prior to bark being laid.

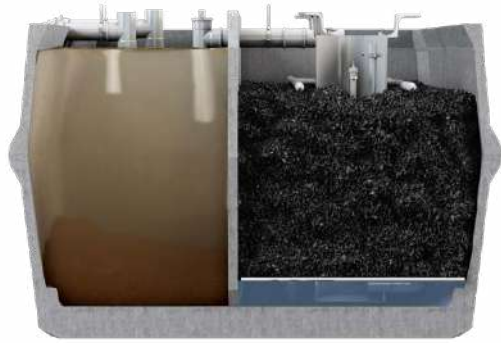


FIG. 3 X-Perco

The X-Perco®

Product Range

- 1.8 m³/day (approx 0-5 bedroom)
- 3.0 m³/day (approx 5-7 bedroom)
- Commercial application up to 30 m³/day

Features

- Can be retrofitted to an existing septic tank
- Passive Filtration treatment
- Flexible disposal option
- Simple to service

Distribution options

- Flout passive dosing system (no power)
- Pump Station

Land Application

- Drip irrigation into landscaped garden bush or trees
- LDPE into sand trenches
- ETS Beds
- Sand beds

Components

1. Primary Tank
2. Xylit Filter
3. Gravity, pump or passive dose disposal system

Process

Primary Tank

1. Wastewater arrives into the primary septic tank by gravity from the building. The solid matter will settle on the floor of the primary septic tank to be “degraded” by anaerobic bacteria. The suspended (*floating*) matter such as fats and oils will form a “crust” at the surface. The outlet of the primary septic tank is fitted with an approved biological filter to prevent suspended matter from passing through to the second (*treatment*) compartment.

Xylit Trickling filter

2. The pre-treated and filtered waste enters the Xylit filter bed by gravity into the distribution device (*Aquacan*). The Aquacan fills and alternately disposes into a network of perforated pipes to evenly distribute over the Xylit filter bed.
3. The “pre-treated” waste water slowly trickles through the Xylit media, where the population of digesting bacteria develop to digest and purify the waste liquid.
4. Oxygen is supplied to the filter by a network of 100mm diameter pipes. This is achieved with No power.

Distribution

5. The treated water leaves the filter by gravity from the floor of the filter tank into the dose flout (*no power*) or pump chamber
6. The treated water is gravity dosed or pumped into the land application (*disposal*) area
7. The land application area is chosen for its potential for gravity or pumped distribution. The treated waste can be distributed through drip irrigation, LDPE or UPVC piped trenches.
8. The X-Perco has a small battery operated alarm that will activate in the unlikely event the water level in the filter is raised.

Treatment Performance

BoD₅ < 20 mg/litre

SS < 30 mg/litre

Unique dosing and distribution device

The unique and innovative flow distribution Aquacan and pipe network guarantees optimal distribution of the influent over the filter media. The flow can be simply adjusted during installation or servicing to suit the required application within the maximum design flow.

Lightweight concrete tank

The X-Perco tank is constructed from reinforced fiber, self-compacting concrete. This revolutionary concrete guarantees long service life and light weight construction. The X-Perco tank is easy to handle, simple to install, and can be installed in groundwater. Its highly robust nature allows for the passage of foot traffic and mowers or can be designed to carry light vehicles.

- Ultra strong
- Reinforced fibre concrete
- Light vehicle traffic up to 3.5 T allowed (with design)
- Discrete low visual impact
- Groundwater installation possible
- Easy access to internal components

Guarantee!

We offer:

- 10 year guarantee X-Perco concrete tank
- 10 year guarantee xylit filtering media
- 2 year guarantee internal components (Aquacan distribution system).

Note:

¹ See the warranty certificate.

² Valid on systems up to 3 m³/day. Subject to compliance with the installation, treatment application, appropriate water volume and pollution load.

³ Excluding parts subject to wear and tear.

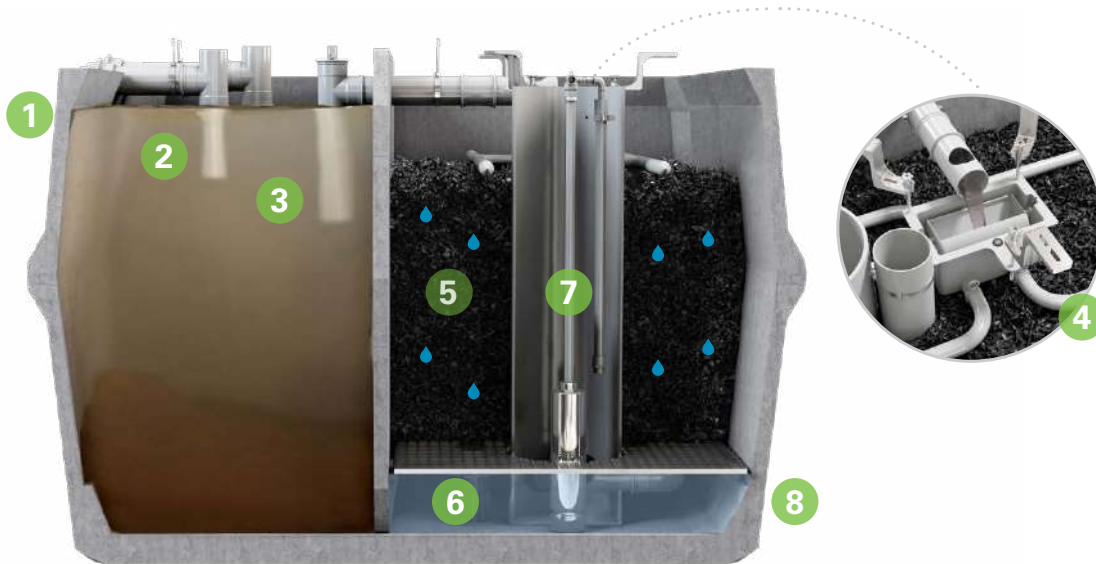


FIG. 4 X-Perco Components

- | | |
|--------------------------------|------------------------|
| 1. Inlet pipe | 5. Xylit filter bed |
| 2. Ventilation pipe | 6. Pump volume chamber |
| 3. Biological outlet filter | 7. Pump chamber & pump |
| 4. Aquacan distribution system | 8. Gravity outlet |

Eloy Water Network

Eloy Water is a Belgian Company which has been a designer, producer and distributor of purification systems for the treatment of domestic and industrial wastewater since 1965. Specialising in the treatment and the reuse of wastewater from single domestic dwelling to medium size communities, Eloy Water has always invested in the development and integration of the latest technologies into its production.

With a presence in 25 countries, Hynds Pipe Systems Ltd is the exclusive distributor of Eloy Water products in New Zealand.

Branches Nationwide Support Office & Technical Services 09 274 0316

Disclaimer: While every effort has been made to ensure that the information in this document is correct and accurate, users of Hynds product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hynds unless expressly stated in any sale and purchase agreement entered into between Hynds and the user.

X-Perco® 3.0 (2 Tank System)

Powerless Wastewater Treatment Plant

Technical Sheet WW 3.0XP
Updated August 2023

Technical Information

| | |
|-----------------|-----------------------------|
| Product: | X-Perco® 3.0 |
| Model: | 3 m³/day - X-Perco C90 |
| Process: | Trickling Filter Technology |
| Codes: | WWSPLIT6OL2, WWXYF1.8 |

| Dimensions Volumes Weights | | | | |
|--------------------------------|----------------|-----------------------------|-----------------------------|--|
| Measurements | Unit | Tank 1 | Tank 2 | Tank 3 Pump Station |
| Total height (incl. riser) | mm | 2450 | 1700 | 2300 |
| Entry height | mm | 2000 | 1270 | TBC on site |
| Exit Height | mm | 1960 | 90 | TBC on site |
| Length | mm | 2380 | 2650 | N/A |
| Width | mm | 1580 | 2250 | Ø1050 |
| Total Volume | m ³ | 6 | 6.2 | - |
| Useful Volume | m ³ | 5.14 | 4.02 | - |
| Weight | T | 2.8 | 5.75 | - |
| Main Service Entry Ø | mm | 620 | 620 | 600 |
| Primary Filter Access Ø | mm | 620 | N/A | N/A |
| Desludge Port Ø | mm | 620 | 620 | 600 |
| Inlet/Outlet pipe Ø | mm | Inlet = 110 Outlet = 110 | Inlet = 110 Outlet = 110 | Inlet = 110 Outlet = 32 (pumped) |

Material

| | |
|----------------------|--|
| Tank | High Performance Fibre Reinforced Concrete |
| Media (Xylit) | Fossilised natural wood fibre |

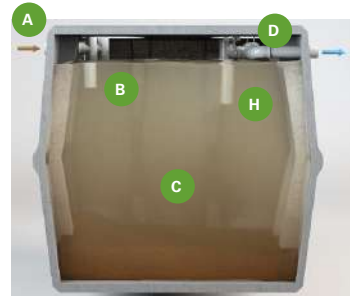
Performances

| Influent Quality | | |
|--------------------|---------------------|---------|
| Parameters | Unit | Results |
| BOD ₅ | mg /L | 400 |
| | kg /day | 1.2 |
| TSS | mg/L | 600 |
| | kg/day | 1.8 |
| TN | mg/L | 62 |
| | kg/day | 0.2 |
| Fat & Oil | mg/L | 20 |
| Detergent | mg/L | 10 |
| Daily flow | L/day | 3000 |
| Application Limits | Domestic wastewater | |
| | • Double dwelling | |
| | • Max. 15 people | |

| Effluent Quality | | |
|---------------------|------|----------------|
| Parameters | Unit | Results |
| BOD ₅ ** | mg/L | <20 |
| TSS** | mg/L | <30 |
| TN** | mg/L | <40 (expected) |

**Based on PIA-AS11. Assuming the system is installed and maintained as per X-Perco 1.6ST Installation Manual and Operations and Maintenance Manual.
Note: Performance results are based on a 24 hour composite sample taken after the irrigation filter

Features



Legend

- A. High inlet
- B. Ventilation T pipe
- C. Primary treatment tank
- D. Flow distribution System
- E. Biological reactor tank
- F. Treated water discharge piping system
- G. Gravity discharge outlet
- H. PL-122 filter
- I. Split flow device
- J. Aquacan Distribution System

Operation

| Installation Limits | |
|------------------------------------|----------------------|
| Recommended depth of cover to tank | 300mm |
| Max. depth of cover to lid | 600mm |
| Traffic Load with PE lids | Pedestrian |
| Traffic Load with heavy duty lids | Light traffic(<3.5T) |

| Useful Volumes | |
|--|------|
| Primary Treatment Tank m ³ | 5.14 |
| Biological Reactor Tank m ³ | 4.02 |
| Emergency Storage m ³ | 3.04 |

| Maintenance | |
|------------------------------------|-----------|
| Desludging Required (Primary Tank) | 50% |
| Servicing Frequency | 6 monthly |

| Electromechanical Components | |
|------------------------------|-------------------------|
| Pump Controller | WWPUMPCONTROL |
| Pump Type | Submersible BIA - B42AV |
| Pump Rated Output | 0.55kW |

| Consumables (Subject to Recommended Servicing) | |
|--|----------------|
| Alarm Battery | Every 7 years |
| Xylit | Every 10 years |
| Aquacan Ball Bearings | Every 2 years |
| Aquacan System | As Required |

Components and Options

| X-Perco 3.0 Components | | | | | |
|---------------------------------|----------|-------------|----------------------|--------------|------------|
| Kit Components | Quantity | Length (mm) | Diameter/ Width (mm) | Heights (mm) | Weight (T) |
| Treatment System | 2 Tanks | 2380/2650 | 1580/2250 | 2450/1700 | 2.8/5.75 |
| Primary Tank Access Riser & Lid | 2 | - | Ø620 | 200 | - |
| Xylit Tank Access Riser & Lid | 3 | - | Ø620 | 200 | - |
| Filter - PL122 | 1 | - | - | - | - |
| Irrigation Filter - 130 Micron | 1 | - | - | - | - |
| Pump Station - FB10502100NH | 1 | - | Ø1050 | - | 0.23 |

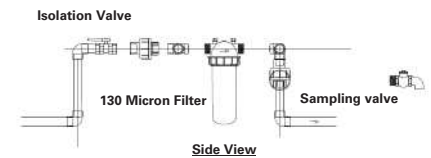
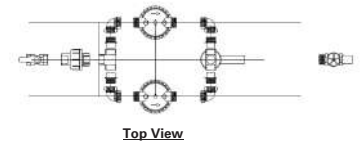
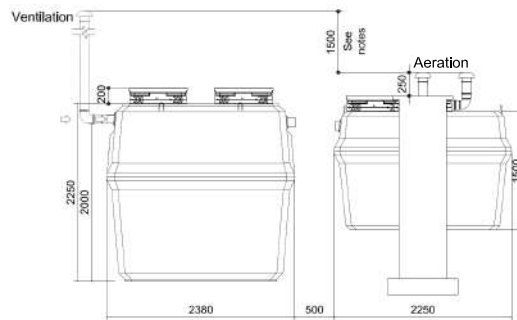
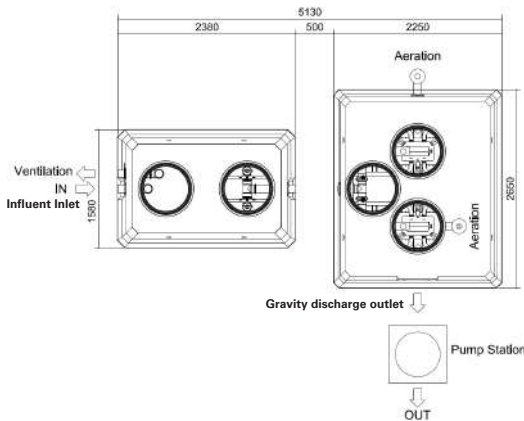
For further details please contact Hynds Wastewater Team



| X-Perco 3.0 Options | | | | | |
|---------------------------------|----------|-------------|----------------------|--------------|------------|
| Kit Components | Quantity | Length (mm) | Diameter/ Width (mm) | Heights (mm) | Weight (T) |
| High Level Alarm with Batteries | - | - | - | - | - |
| PE Riser | - | - | Ø600 | 200 | - |
| PE Lid | - | - | Ø600 | - | - |
| Odour Cartridge | - | - | - | - | - |

For further details please contact Hynds Wastewater Team

Dimensions



Notes

1. The aeration pipework of the Xylit Filter chamber must be 250mm in height from the ground and in an open location
2. The ventilation pipework should be higher than the aeration pipework. The ventilation must always be installed above the roof of the nearest building or at least 1500mm higher than the aeration pipework if it can only be installed on the treatment system. The higher the better as it catches the wind and creates the draft effect

Irrigation Filter Installation

NOTE: The sampling valve must be locked or rendered inoperable. Location of the sampling valve must be clearly marked "Wastewater - Do not drink/use"

| Certifications/Accreditations/Testing Results | Warranties | Year | Extension | Supporting Documents and Resources |
|---|-------------------------|-----------|-----------|--|
| CE PIA- AS11 | Tank | 10 | NA | Installation Manual Owner's Manual |
| | Xylit | 10 | NA | Operation and Maintenance Manual Field Service Report |
| | Other Components | 2 | NA | Performance Testing Results Installation & Commissioning Report |
| | | | | Loading certificate (By Designer) Claims Procedure & Certificate Warranty |
| | | | | ID card(where applicable) Service Contract |

Conditions of Warranty:

- Refer to Hynds Wastewater Warranty Terms and Conditions
- Commissioning report completed and returned by trained installer
- Documented service history commencing from commissioning date

Important Pump/s Disclaimer: The selected pump must match the hydraulic requirements of the land application system (LAS) for the specific on-site wastewater management system (OWMS). As there are several different LAS designs, each will require pumps to provide the required pressure and flowrate to ensure sustained and effective LAS performance. It is strongly recommended that the specifications of the selected pump for each OWMS are formally provided by the designer of each OWMS.



Submersible High Head Pump

810273 - BIA-B42AV



1. Introduction

Congratulations on your purchase of a Bianco B42AV Submersible Pump.

The B42AV is a premium quality pump suitable for small to medium clean water, dewatering and or wastewater transfer applications.

The B42AV is designed specifically for AWTS (Aerated Water Treatment Systems) i.e., for discharging from Secondary Treatment septic tanks.






2. Key Features

- Quality pump materials and construction to ensure reliable operation
- Glass Filled Nylon pump body and Stainless Steel motor cover
- Easy Grip, Nylon carry handle
- Triple Seal System: Dual mechanic Seal (Carbon Ceramic) in oil bath and Oil Seal
- 3 Stage, High Head pump with durable noryl impellers
- Elevated (88mm) suction intake with algae-resistant slotted strainer
- 10m Power lead and automatic Float Switch
- All Cables to H07RNF neoprene
- Automatic On/Off operation controlled by a vertical float
- Light weight








3. Contents

| | |
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| 2. Key Features | 2 |
| 3. Contents | 2 |
| 4. ISO 7010 Symbols used in this manual | 3 |
| 5. Warnings | 3 |
| 6. Cautions | 4 |
| 7. Technical Specifications | 4 |
| 8. Electrical Connections | 5 |
| 9. Installation & Operating Instructions | 5 |
| 10. Replacement pump in an AWTS system | 6 |
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| 12. Warranties – Terms and Conditions | 7 |

4. ISO 7010 Symbols used in this manual

| | |
|---|--|
|  | Warning - Electrical safety |
|  | Warning – Potential consequences of use outside of intended application(s). Includes environmental condition warnings. |
|  | Mandatory warning |
|  | Warning to disconnect power |
|  | Read carefully |

5. Warnings

| | |
|---|---|
|  | Read the manual carefully before starting |
|  | Prior to starting installation or any maintenance the pump must be disconnected from the power supply and pressure relieved from the system including controller, pump and associated pipework. |
|  | A qualified electrician should correctly size and install circuit breakers to protect the power supply. The fitment of additional surge protection is recommended. |
|  | Any changes or modification to the wiring must be carried out by suitably qualified personnel. |
|  | This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. |
|  | To avoid excessive thermal shock to the motor, the pump should not start more than 20 times in any one-hour period. The pump relies on pit water for cooling and should not operate partially submerged for longer than 10 minutes. Sustained operation at high head/low flow will result in overheating and compromise pump life expectancy |
|  | Ensure that the installation will comply with all applicable local regulations. |

6. Cautions

The pump relies on pit water for cooling and should not operate partially submerged for longer than 10 minutes. Sustained operation at high head/low flow will result in overheating and compromise the pump life expectancy

Running the pump without water or allowing the pump to run dry will damage the mechanical seal and void the warranty.

Avoid situations where the pump could be exposed to corrosive liquids or gasses, or to flammable materials, solvents etc.

Fitment and replacement must be carried out by competent, skilled, qualified personnel.

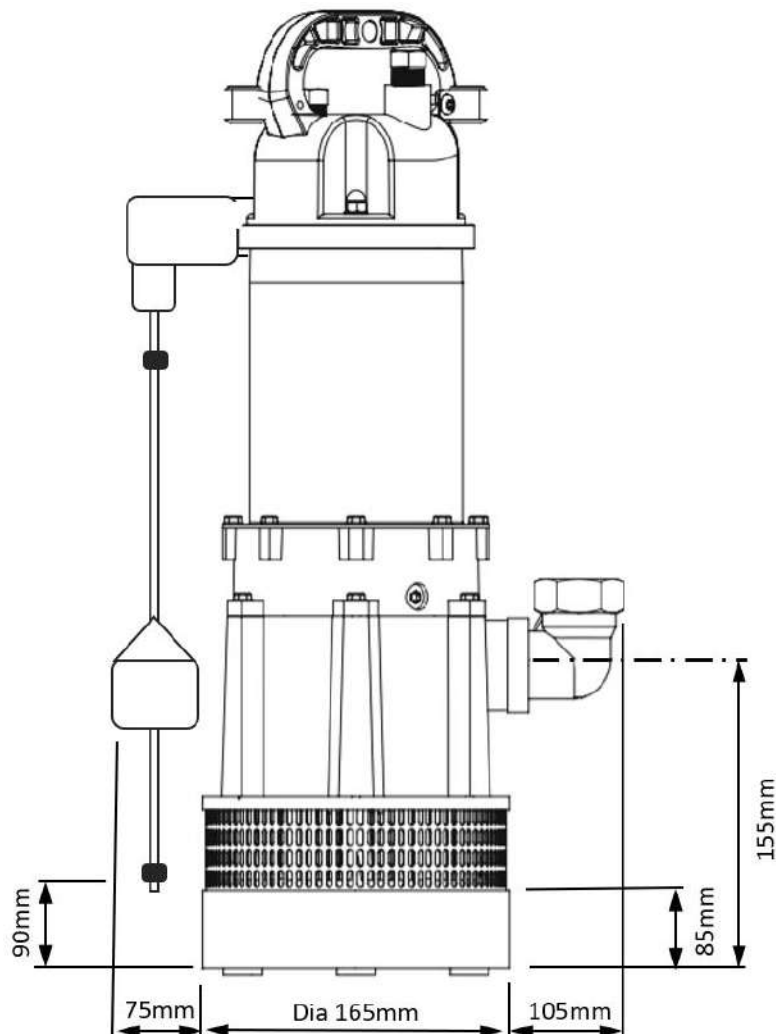
7. Technical Specifications

| | Part # | kW | Amps | Volts | Max Head | Max Flow | Max Solids | Outlet |
|------------------|--------|------|------|-------|----------|----------|------------|---------|
| BIA-B42AV | 810273 | 0.55 | 4.0 | 240 | 32m | 105 lpm | 3mm | 1" BSPF |

Dimensions:

470mm high

Float travel:
Approx 190mm
(Adjustable)



8. Electrical Connections

Voltage: 240V 50Hz Single Phase, +10 / -5%, DOL connection

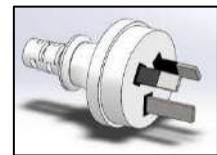
WARNINGS:

- All electrical work must be performed by an authorized electrician, in compliance with Au/NZ Wiring Regulations. Never allow an unauthorized person to perform electrical work.
- Improper wiring can lead to current leakage, electrocution, fire or pump failure.
- A power point (10amp) should be provided by a qualified electrician in compliance with the requirements of AS/NZS 3000.



Always use an electrical outlet protected by Residual Current Device (RCD) Safety Switch with a trip current of 30mA or less. A Safety Switch is required by Au/NZ Standard **AU/NZS 60335.1-2011**.

The pump is supplied with a 10 amp rated lead and AS/NZ 3112 (Type 1) 3 pin male power plug for connecting to mains power.



Exercise care with the power cord. Route the cord carefully to avoid potential snagging or chafing hazards.



Never lift the pump by the power cord or disconnect from the power supply by pulling the cord.

9. Installation & Operating Instructions

Pumps should never be used to pump flammable or corrosive fluids.

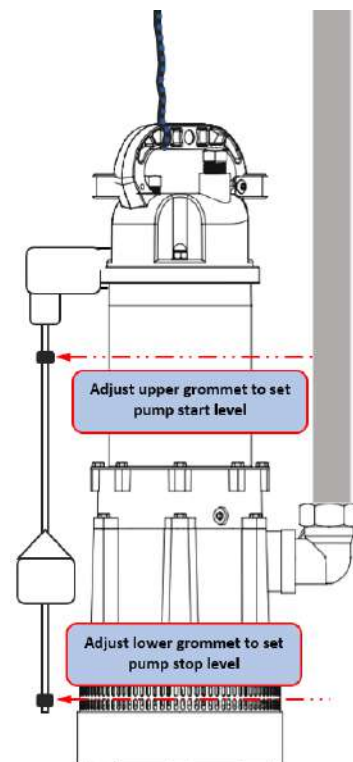
Installation

The Bianco B42AV pump should be installed on a level surface in a stationary position connected to fixed pipe work. Flexible pipe can only be used if no blockages or kinks are ensured.

A rope or lifting chain must be attached to the handle of the pump at the time of installation. **Never remove or lift a pump by its power cable.**

Automatic pumps with a float switch should be installed in a sump or pit of suitable size for the float switch to operate correctly. The float must not touch anything which could prevent the pump from switching off and causing it to run dry.

The float switch start and stop levels are set by adjusting the position of the rubber grommets (stops) on the vertical float rod.



All single phase models have automatic reset thermal overload protection built in. This thermal overload will switch the motor off in an overload/overtemperature situation and will automatically reset when the motor has cooled down.

If the supply cord is damaged, the pump should be returned to White International or one of our Authorised Service Agents for repair in order to avoid potential injury/electrical shock.

10. Replacement pump in an AWTS system

When replacing the pump in an AWTS system it is strongly recommended to perform a volumetric pump-down test OR to fit a pressure gauge to the discharge piping to assess the condition of the dispersal field.

Sustained operation at high head/low flow will result in overheating and compromise the pump life expectancy

11. Trouble Shooting Guide

| Fault | Cause | Remedy |
|--------------------------------------|---|--|
| Pump does not start | No mains supply | Check that power is available at the power socket and that it is switched on |
| | Blown fuse or tripped breaker | Replace fuse or reset breaker |
| | Impeller jammed | Disconnect power and clean impeller |
| | Thermal overload has been activated | Allow the switch to reset itself |
| | Float switch is in the down/off position | Free the float switch and change the position of the pump to prevent this in future |
| | Insufficient water level | Float switch must be in the up/on position (45° above horizontal) |
| No or low flow | Strainer or impeller blocked by debris | Disconnect from power and clean impeller area |
| | Damage caused by abrasive media | Pump may need to be serviced to replace worn parts |
| | Excessive friction loss or high delivery head | Reassess if the pipe size and pump is suitable for the application |
| Pump does not stop | Float switch is in the up/on position | Free the float switch and change the position of the pump to prevent this in future |
| | Possible faulty float switch | Pump may need to be serviced to replace faulty part |
| Pump switches off after short period | Thermal overload has been activated | Disconnect power and make sure impeller is not clogged |
| | | Ensure water temperature is below 40° |
| | | Check the length of the power supply cable/extension. Possible voltage drop over long distances. |
| | | Ensure the pump is not operating at a very low flow or very high head. |

12. Warranties – Terms and Conditions

This warranty is given in addition to the consumer guarantees found within the Australian Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 NZ for goods purchased in New Zealand:



1) White International Pty Ltd / White International NZ Ltd (White International) warrant that all products distributed are free from defects in workmanship and materials, for their provided warranty period as indicated on the top or opposite side of this document. Subject to the conditions of the warranty, White International will repair any defective products free of charge at the premises of our authorised service agents throughout Australia and New Zealand if a defect in the product appears during the warranty period. If you believe that you have purchased a defective product and wish to make a claim under this warranty, contact us on our Sales Hotline on 1300 783 601, or send your claim to our postal address or fax line below and we will advise you as to how next to proceed. You will be required to supply a copy of your proof of purchase to make a claim under this warranty.

2) This warranty excludes transportation costs to and from White International or its appointed service agents and excludes defects due to non-compliance with installation instructions, neglect or misuse, inadequate protection against the elements, low voltage or use or operation for purposes other than those for which they were designed. For further information regarding the suitability of your intended application contact us on our Sales Hotline on 1300 783 601. If you make an invalid claim under this warranty, the original product will be sent back to you unrepai red.

3) This warranty refers only to products sold after the 1st January 2012, and is not transferable to another product type and only applies to the original owner, purchaser or end user, and is in addition to the consumer guarantees found within the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand.

4) Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. 2 YEAR WARRANTY.

5) To the fullest extent permitted by law, White International excludes its liability for all other conditions or warranties which would or might otherwise be implied at law. To the fullest extent permitted by law, White International's liability under this warranty and any other conditions, guarantees or warranties at law that cannot be excluded, including those in the Competition and Consumer Act 2010 (Cth), is expressly limited to: (a) in the case of products, the replacement of the product or the supply of equivalent product, the payment of the cost of replacing the product or of acquiring an equivalent product or the repair of the product or payment of the cost of having the product repaired, is at the discretion of White International or a 3rd party tribunal elected under the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand; and

6) To the fullest extent permitted by law, this warranty supersedes all other warranties attached to the product or its packaging.

7) In the case of services, supplying the services again or the payment of the cost of having the services supplied again, is at the discretion of White International or a 3rd party tribunal elected under the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand. 8) Our warranty commences from the date of purchase of the above mentioned pumps. Proof of purchase is required before consideration under warranty is given.

Record your date of purchase in the space below and retain this copy for your records.

Date of Purchase**Model Purchased**



www.whiteint.com.au

www.whiteint.co.nz

Please always refer to our website for further technical information & new product innovations

Disclaimer: Every effort has been made to publish the correct information in this manual. No responsibility will be taken for errors, omissions or changes in product specifications.

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PRODUCT DATA SHEET

BIA B42AV • 810273



BRAND

**BIANCO
PUMPZ**

PRODUCT DETAILS

The Bianco B42AV is a variant from the highly successful B42 family a 'High Head' multi-impeller submersible type suitable for supplying pressurised water from tanks. The AV suffix refers to the fitment of a vertical 'fixed' float rather than the standard flexible style control float. Designed for use with any clear (clean and pre-treated) water the B42 pump family are best known for their reliability and performance when delivering treated wastewater to pressure compensating dripper beds

BENEFITS

- Slotted stainless steel strainer inhibits algal blockage
- Elevated (85mm) intake to avoid sludge layer
- Light weight - easy to lift and lower
- Great energy efficiency for reduced running costs
- Drinking water
- General hobby activity

FEATURES

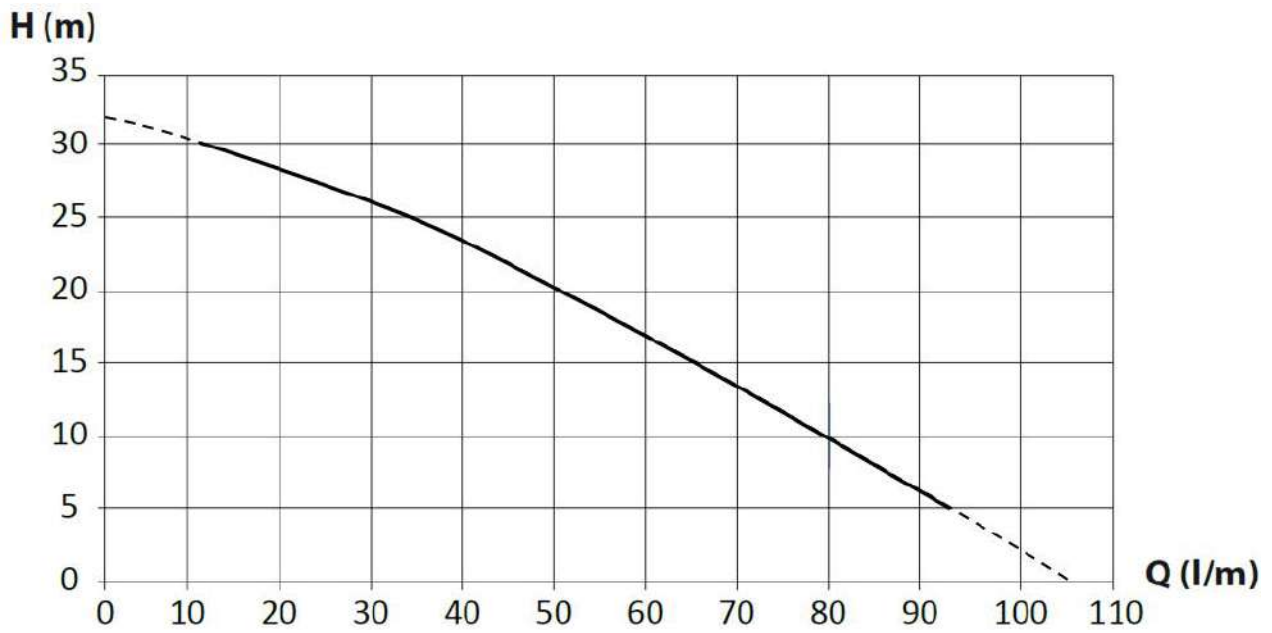
- Quality pump materials and construction to ensure reliable operation
- 5 star energy rating
- Dual mechanical seals (Carbon/Ceramic pump side, Silicon Carbide / Ceramic motor side) in an oil bath.
- 10m H07RN-F Neoprene power lead
- Automatic on/off
- Easy to install and use

TECHNICAL DATA

| | |
|-------------------------------|---|
| RATED POWER (W) | 550W |
| MAX. FLOW [LPM] | 105 lpm |
| RATED FLOW [M3/H] | 1 m3/h |
| MAX. HEAD [M] | 32m |
| WORKING TEMPERATURE | < 40°C |
| LIQUID TEMPERATURE | 2°C - 35°C |
| MAX. IMMERSION DEPTH | 12m |
| MAX. DIA. OF PARTICLE | < 2mm |
| MOTOR DUTY | Continuous |
| MOTOR PROTECTION LEVEL | Class F |
| MOTOR PROTECTION | In-built auto re-setting thermal overload |
| CAPACITOR | 20 uF |
| MOTOR SHAFT | Stainless Steel 410 |

| | |
|------------------------------|---|
| RATED VOLTAGE | 220V-240V 50 Hz |
| RATED CURRENT | 4.0A @ 230V |
| POWER CABLE TYPE | H07RN-F |
| LENGTH OF POWER CABLE | 10m |
| PROTECTION CLASS | IP68 |
| IMPELLERS | 3 of Noryl |
| HYDRAULIC BODY | Glass filled Nylon |
| INLET STRAINER | Yes - slotted and elevated |
| OUTLET | 1" BSPF |
| MECHANICAL SEALS | Carbon/Ceramic pump side.Silicon Carbide/ceramic motor side |
| AUTOMATION FUNCTION | Fixed Arm Float Switch |
| NET WEIGHT (KG) | Pump only 12.0kg |
| PACKAGE DIMENSION | 200Lx260Wx550H (mm) |

HYDRAULIC PERFORMANCE



DIMENSIONS

DIMENSIONS

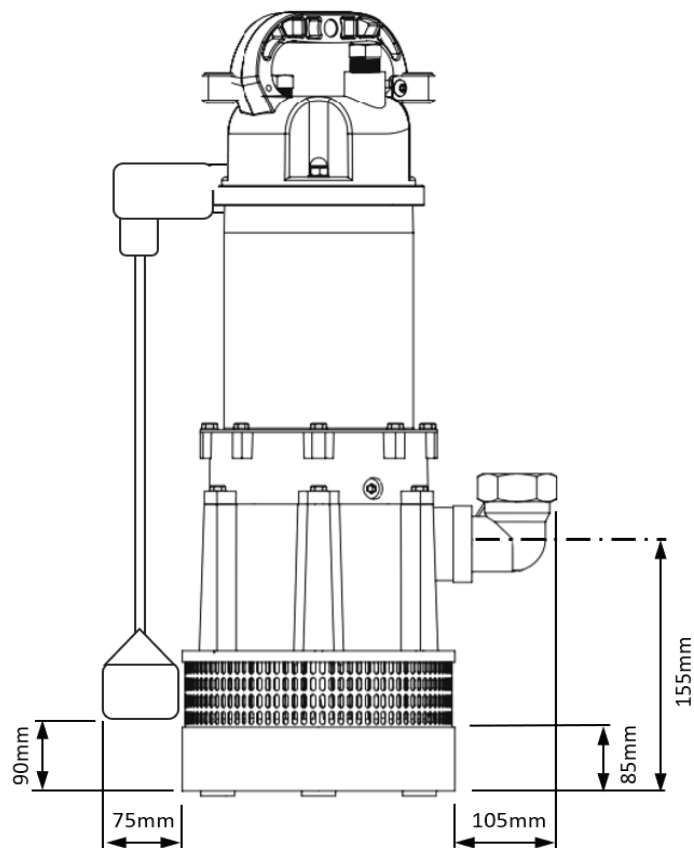
470 mm high

FLOAT TRAVEL

190 mm max (adjustable)

BASE DIAMETER

165 mm



WARRANTY / CERTIFICATIONS





CHARTERED PROFESSIONAL ENGINEERS

ISSUED FOR
CONSENT

APPENDIX C

PROJECT:

**CIVIL DRAWINGS
FOR THE PROPOSED DEVELOPMENT
OF LOT 4 MATAKA STATION
FOR MICHAEL GILSON & JOAN MCPHEE**

PROJECT ADDRESS:

**Lot 4, Mataka Station,
Rangihoua Road**

LEGAL DESCRIPTION:

Lot 4 DP 323083

JOB NO:

23-038A

DATE:

Revision 0 - 19/12/2024

DRAWING INDEX:

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| S1 | DRAINAGE PLAN OVERVIEW |
| S2 | DETAILED DRAINAGE PLAN |
| S3A | STORMWATER DETAILS A |
| S3B | STORMWATER DETAILS B |
| S3C | STORMWATER DETAILS C |
| S4 | WASTEWATER DETAILS |
| S5A | DRIVEWAY DETAILS A |
| S5B | DRIVEWAY DETAILS B |
| EW1.0 | EARTHWORKS CUT/FILL & SILT CONTROL PLAN |
| EW1.1 | SILT CONTROL DETAILS A |
| EW1.2 | SILT CONTROL DETAILS B |
| EW1.3 | SILT CONTROL DETAILS C |
| EW1.4 | EARTHWORKS GENERAL NOTES |

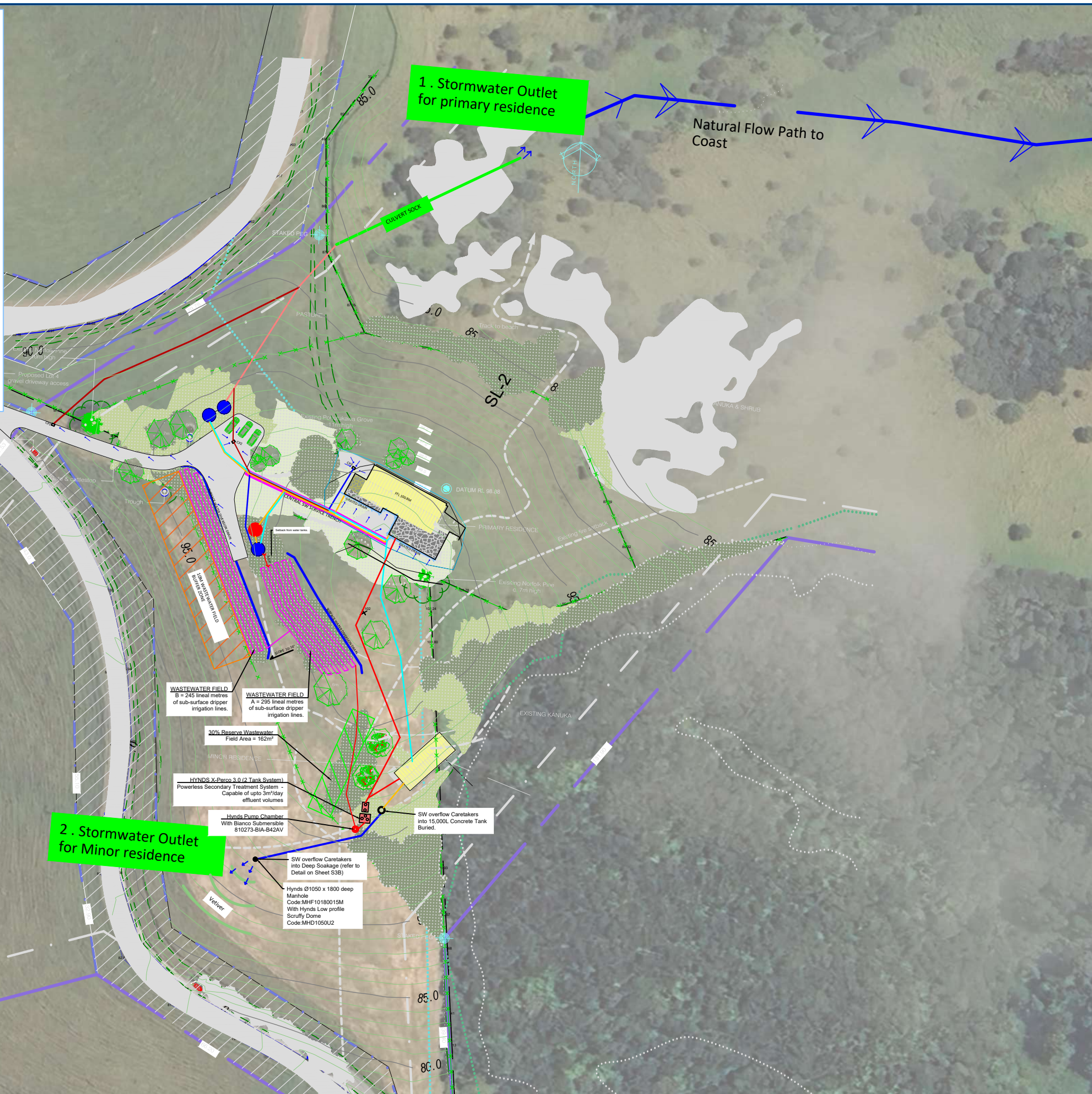
A3

LEVEL 2
ANZ Bank Building
90 Kerikeri road,
P.O.Box 464
KERIKERI

Tel. (09) 4073255
Fax. (09) 4073256
E-mail. pk.engin@xtra.co.nz

STORMWATER OUTLETS

1. PRIMARY RESIDENCE & PAVED AREAS DISCHARGED TO NATURAL FLOW PATH VIA CULVERT SOCK AND DISPERSAL BAR
2. MINOR RESIDENCE ROOF SW OVERFLOWS DISCHARGED TO SOAKAGE PIT AND SCRUFFY DOME OVERFLOW - TO SHEET FLOW. REFER TO SHEET SR3b FOR MORE DETAILS



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 Phone Number: 09 407 3255
 Email: teampk@pkengin.co.nz

CLIENT: GILSONS, M & J

SITE: LOT 4 MATAKA STATION









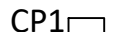

TITLE: PROPOSED DEVELOPMENT DRAINAGE OVERVIEW

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:1000 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038A | A3/S1 | 0 | |

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DRAINAGE KEY

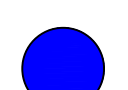
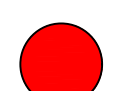
-  Common Service Trench
-  Potable Water supply pipes
-  Ø150 uPVC SN16 Rainwater pipe
-  Grated Drain
-  Ø150 uPVC SN16 SW drainage pipes
-  Ø225 uPVC SN16 SW drainage pipes
-  Ø300 uPVC SN16 SW drainage pipes
-  Ø300 Culvert Sock
-  CP1 Cesspit
-  Stormwater surface flow direction

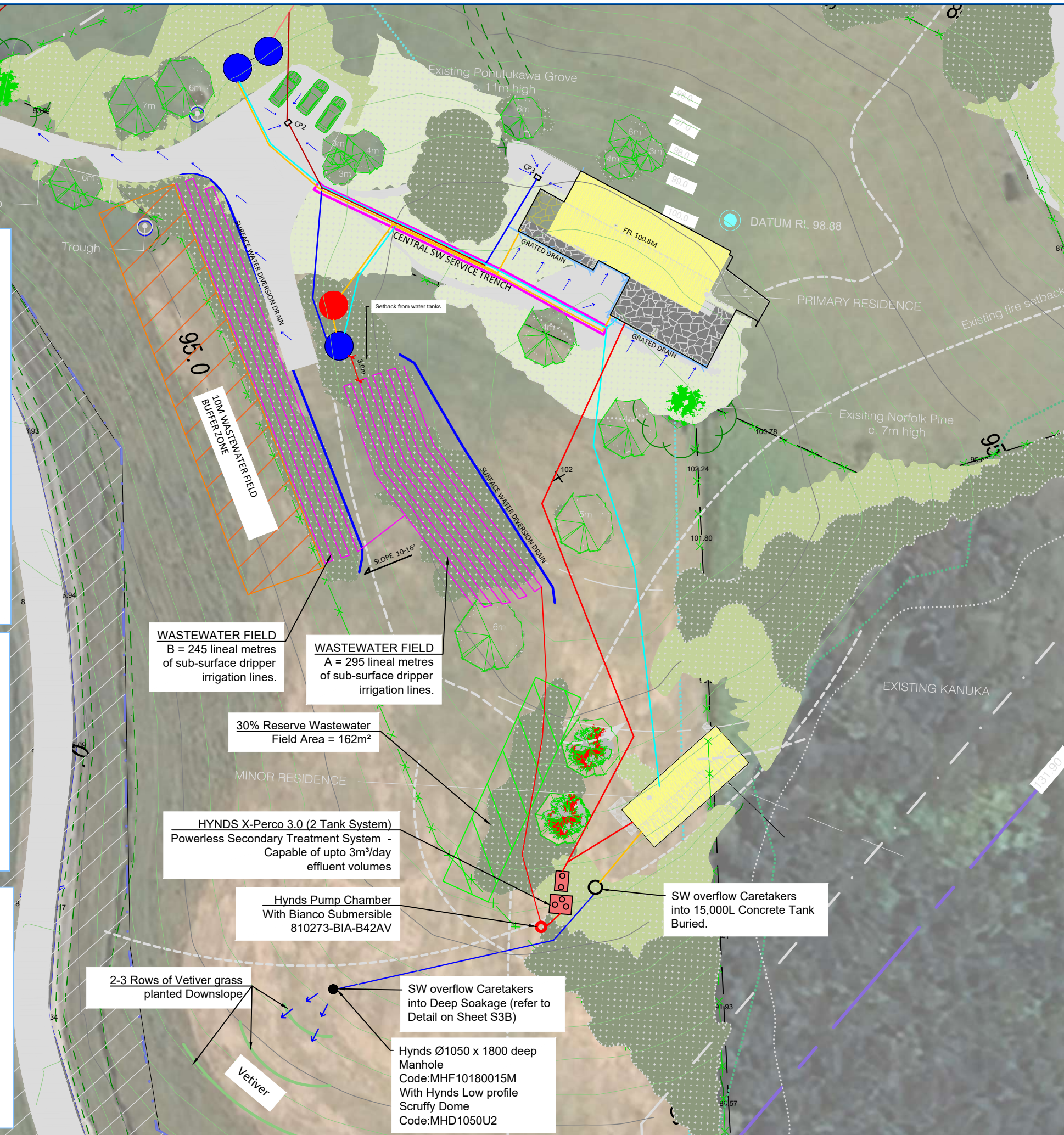
All Drainage pipes to have flexible joins & 1 in 100 Fall for SW and 1 in 60 for greywater.
A registered Drain layer should install all drainage

DRAINAGE KEY

-  Dripper Irrigation Field total 540 lineal metres at 1m spacing between lines.
-  Ø100mm uPVC greywater pipe.
-  Ø40mm PE greywater pipe after Pump.
-  Surface Water diversion drain

DRAINAGE KEY

-  3 x 25,000 L Rainwater tanks (Buried) with SW overflows
-  1x 25,000 L Firefighting supply tank (Buried) Requires a Firefighting Fitting to be fixed



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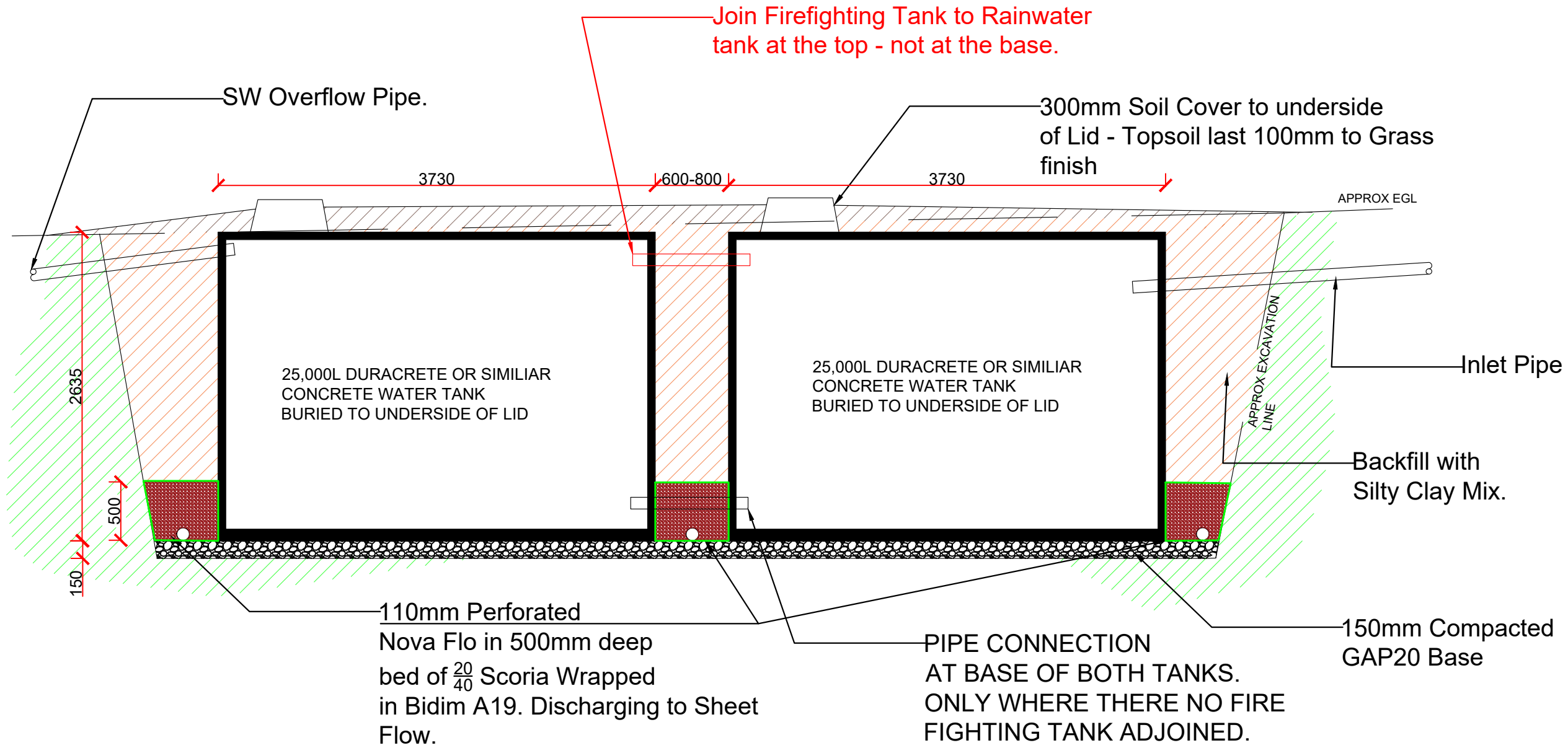
SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
 DETAILED CIVIL PLAN

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:500 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038A | A3/S2 | 0 | |

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BURIED WATER TANK DETAIL
SCALE 1:40

This detail can be adapted for smaller buried water tanks and should be used in conjunction with drainlyers code of practice and suppliers intallation specifications

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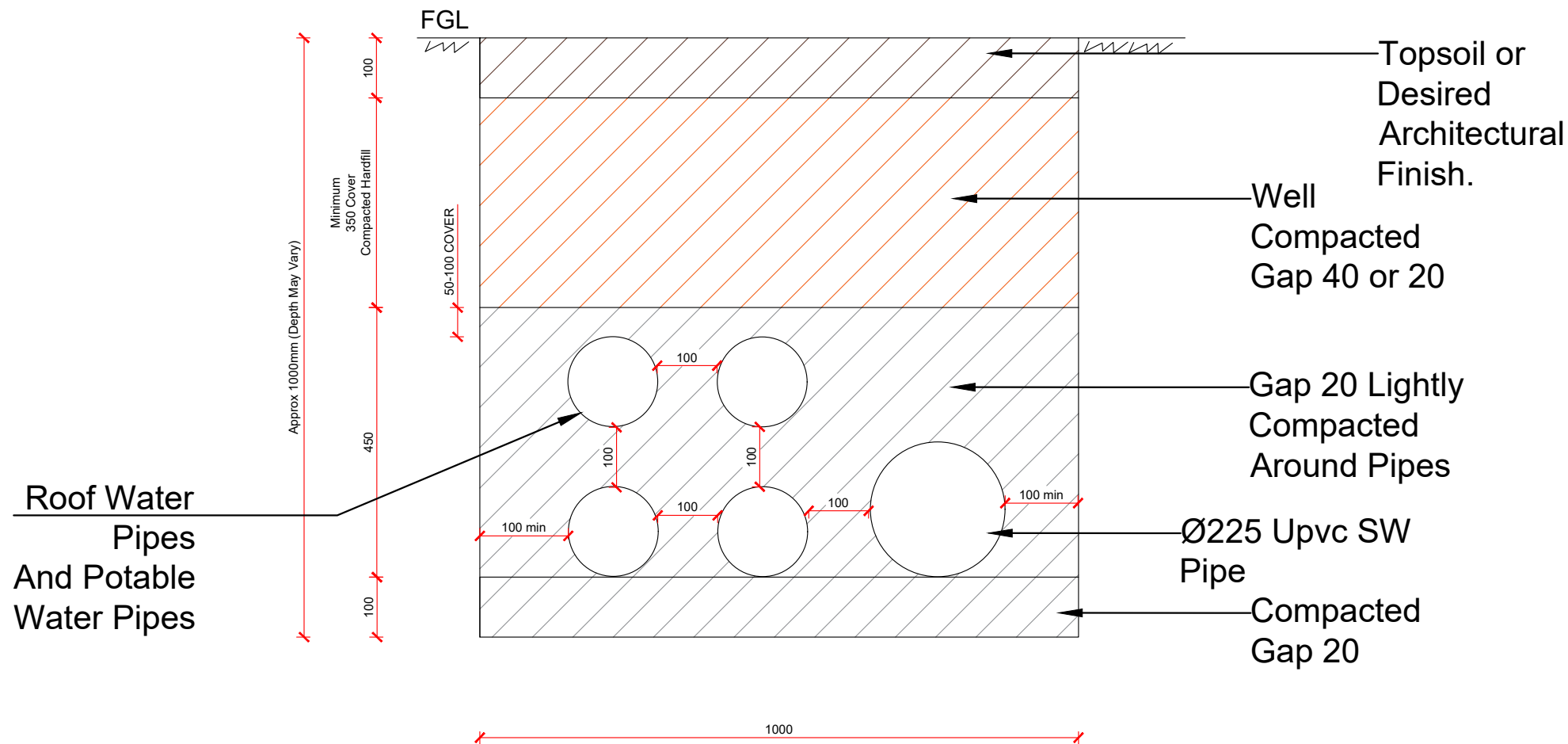
SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
 SW DETAILS A

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:40 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
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**COMMON STORMWATER
AND POTABLE WATER TRENCH
DETAIL
SCALE 1:10**

**ENSURE PIPES ALL HAVE MIN 1 IN 100 FALL
AND FLEXIBLE JOINS - A LICENSED DRAINLAYER
MUST INSTALL THE SERVICES.**



| REV: | DESCRIPTION: | BY: | DATE: |
|----------------------------|--------------|-----|-------|
| STATUS: ISSUED FOR CONSENT | | | |



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CLIENT: GILSONS, M & J

SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
SW DETAILS B

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:10 | DEC 2024 | JW | PK |
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In event of overflow from Soakage Scruffy Dome will create sheet flow

Rows of Vetiver Grass plant @250mm CRS

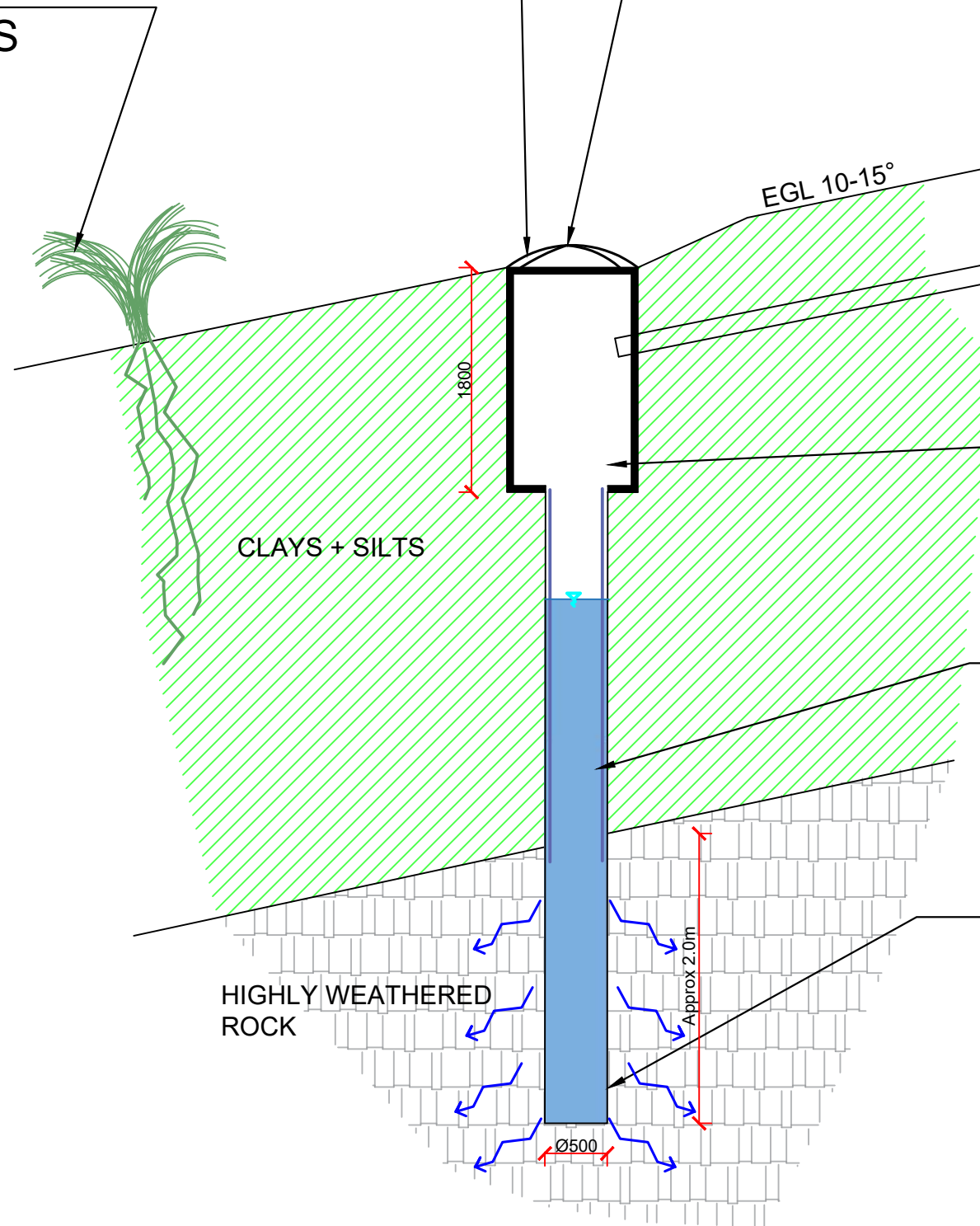
Hynds Ø1050 Manhole 1800 Deep with Low Profile Scruffy Dome

Ø150 SW Overflow pipe from Caretakers

Base of Manhole opening made to suit shape of borehole.

Portion of Borehole Above Rock to be Lined With Culvert Sock

Ø500 Borehole 2m into Highly Weathered Rock



STORMWATER SOAKAGE PIT
SCALE: 1:50

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 I.P.E. CPEng. MIPENZ No. 203058

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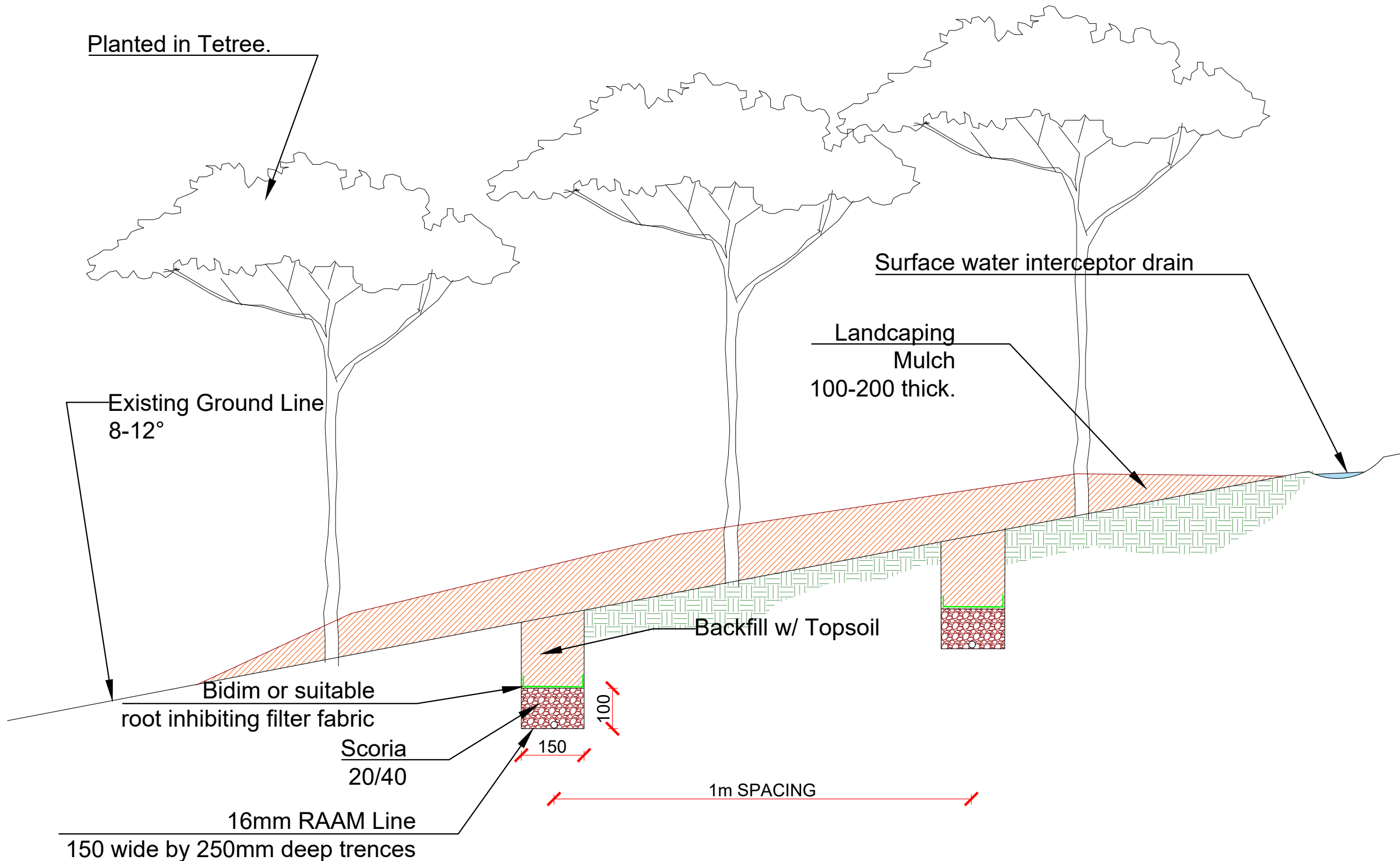
SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
 SW DETAILS C

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:50 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038A | A3/S3C | 0 | |

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BEDDING TRENCH FOR LOW PRESSURE WASTEWATER IRRIGATION PIPE
SCALE 1:10

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 MPE: CPEng, MPENZ No. 203058

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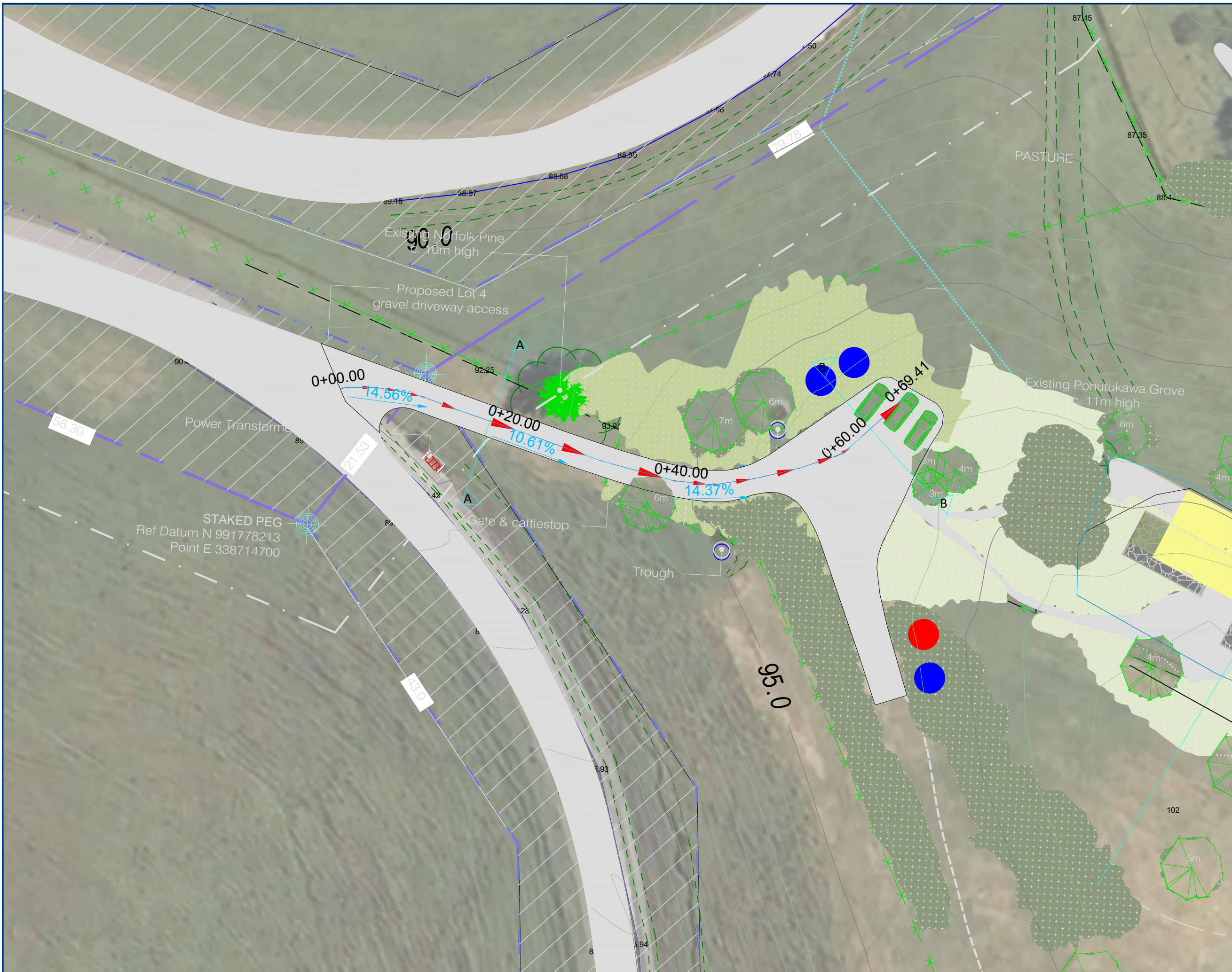
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 PO BOX 464, KERIKERI
 Phone Number: 09 407 3255
 Email: teampk@pkengin.co.nz

CLIENT: GILSONS, M & J

SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT WASTEWATER DETAILS

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:10 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038A | A3/S4 | 0 | |



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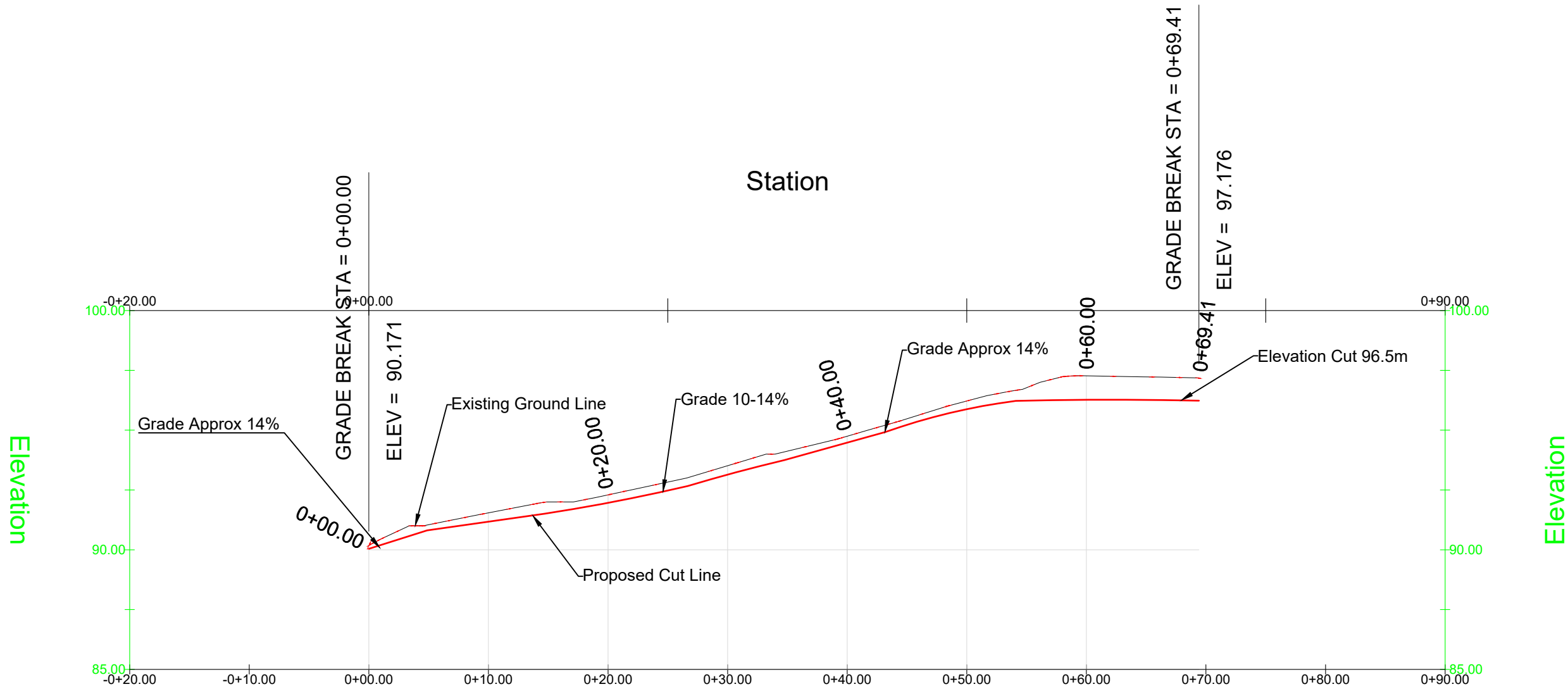
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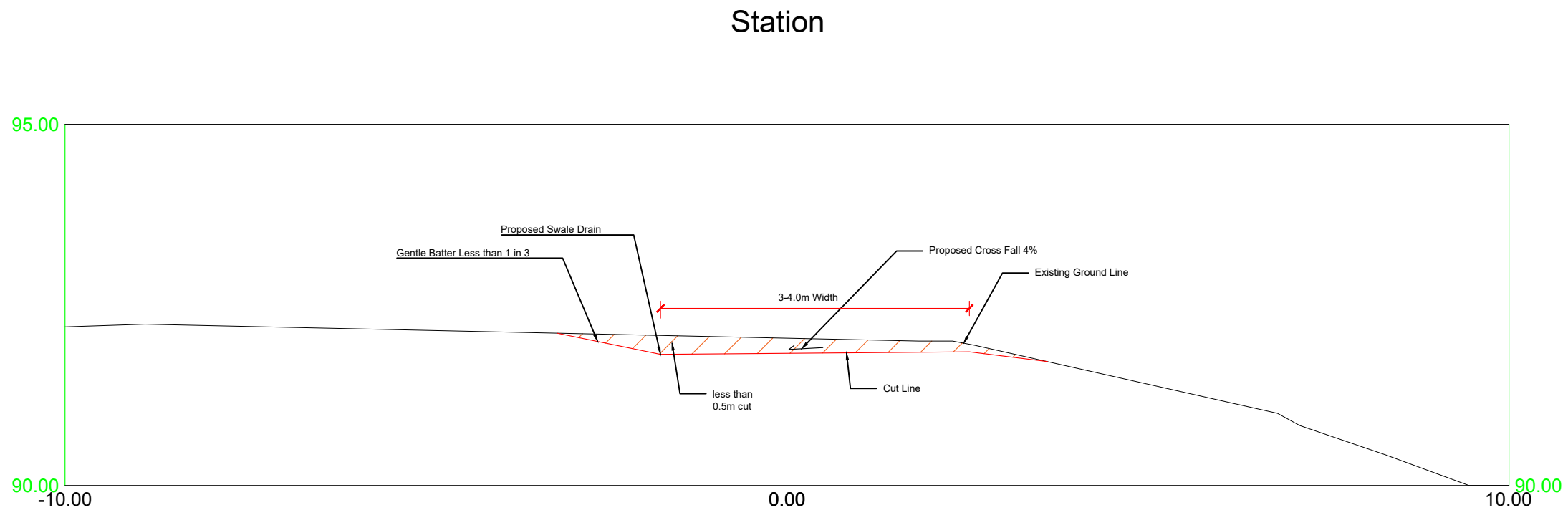
SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT DRIVEWAY ALIGNMENT

| | | | |
|-------------------------------|------------------------------|-----------------------|-----------------------|
| SCALE AT A3: 1:400 | DATE: DEC 2024 | DRAWN: JW | CHECKED: PK |
| PROJECT NO: 23-038A | DRAWING NO: A3/S5A | REVISION: 0 | |



LONG SECTION ALONG CHOSEN DRIVEWAY ALIGNMENT
SCALE 1:400



CROSS SECTION A-A
SCALE 1:75

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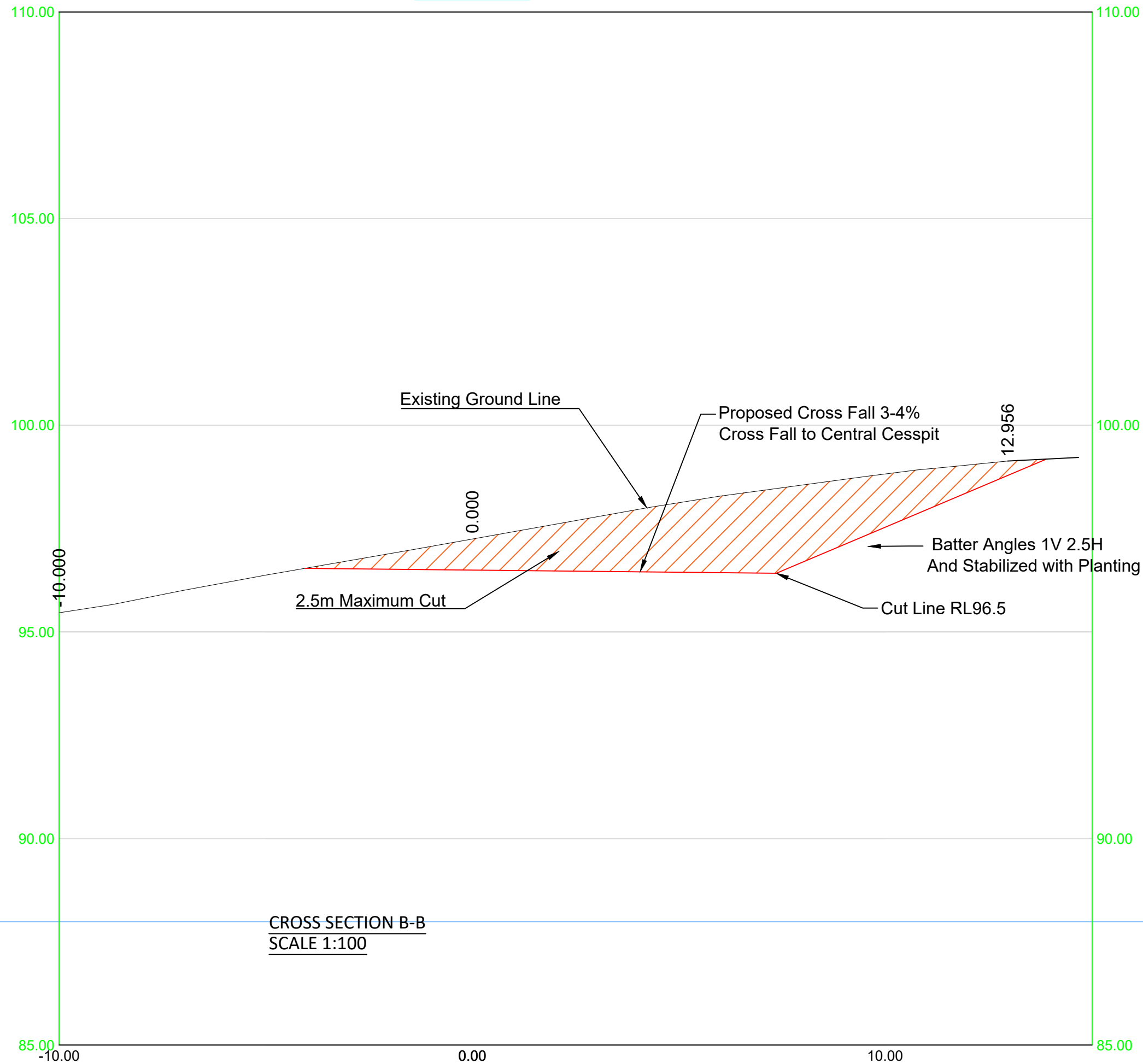
CLIENT: GILSONS, M & J

SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
 DRIVEWAY DETAILS A

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| AS SHOWN | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038A | A3/S5B | 0 | |

0+62.91



CROSS SECTION B-B
SCALE 1:100

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CLIENT: GILSONS, M & J

SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
 DRIVEWAY DETAILS B

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:100 | DEC 2024 | JW | PK |
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CLIENT: GILSONS, M & J

SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
 CUT/FILL & SILT CONTROL PLAN

| | | | |
|--------------|-------------|-----------|----------|
| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
| 1:400 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038A | A3/EW1.0 | 0 | |

**TEMPORARY SEDIMENT CONTROLS
 DESIGNED TO THE SPECIFICATIONS
 OF GD05**

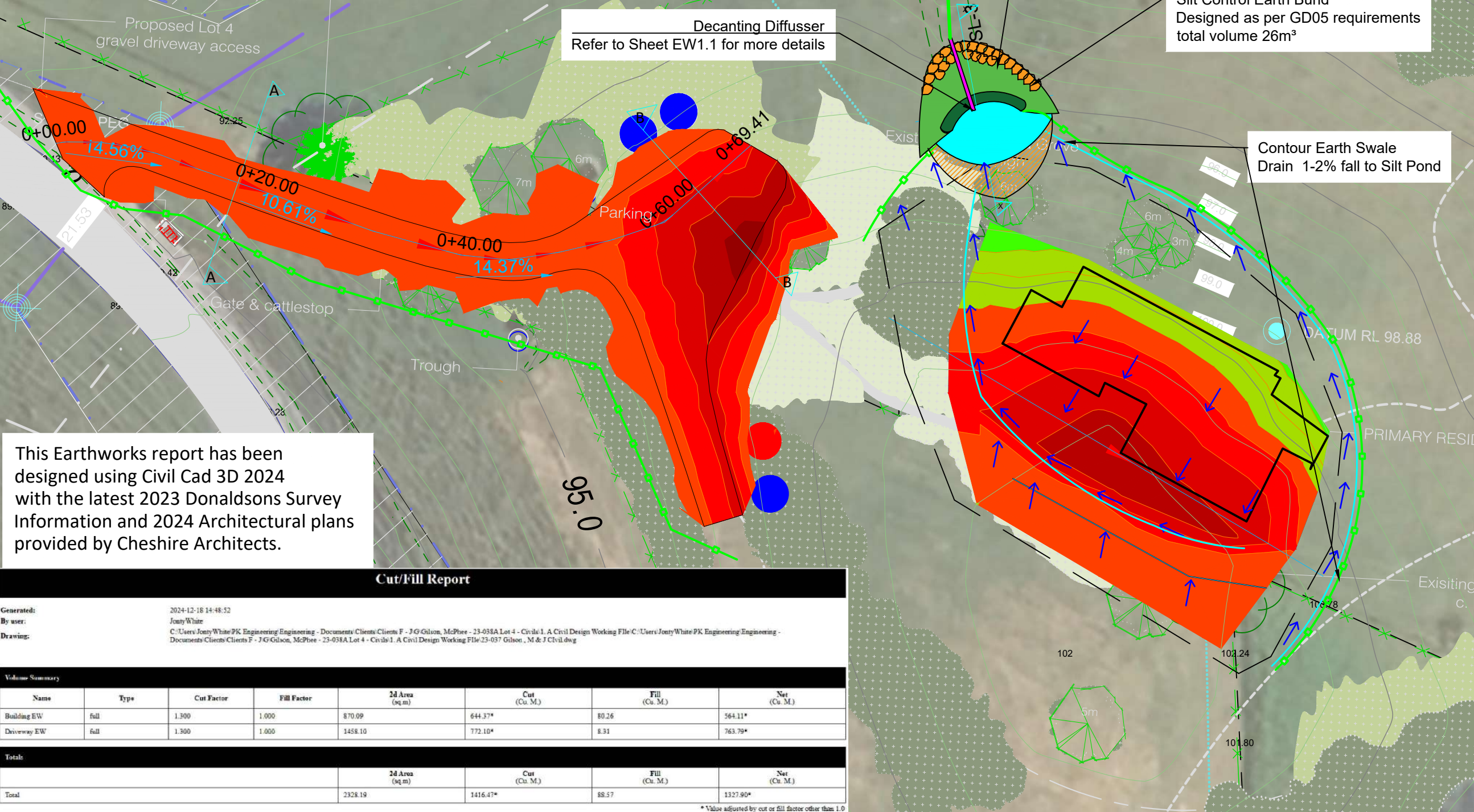
Earthworks Catchment Area = 0.13HA
 Catchment Slope < 18°
 Design for control pond
 200m³ per 10,000m²
 Volume = Area x 200m³ = 0.13 x 200m³
 = 26m³ = 2% of Catchment Area

- Earthworks Catchment Area
- Silt Fence
- Earth Swale Drains
- Stormwater surface flow directions

| Elevations Table | | | |
|------------------|-------------------|-------------------|--------|
| Number | Minimum Elevation | Maximum Elevation | Color |
| 1 | -2.500 | -2.000 | Red |
| 2 | -2.000 | -1.500 | Red |
| 3 | -1.500 | -1.000 | Red |
| 4 | -1.000 | -0.500 | Red |
| 5 | -0.500 | -0.200 | Orange |
| 5 | 0.000 | 1.000 | Yellow |
| 6 | 1.000 | 2.000 | Green |

Earthworks Area = 2328m²
 FFL = RL 100.8
 Cut = RL 100.3

Total Earthworks Volumes
 Cut = 1416m³
 Fill = 88.5m³



This Earthworks report has been designed using Civil Cad 3D 2024 with the latest 2023 Donaldsons Survey Information and 2024 Architectural plans provided by Cheshire Architects.

Cut/Fill Report

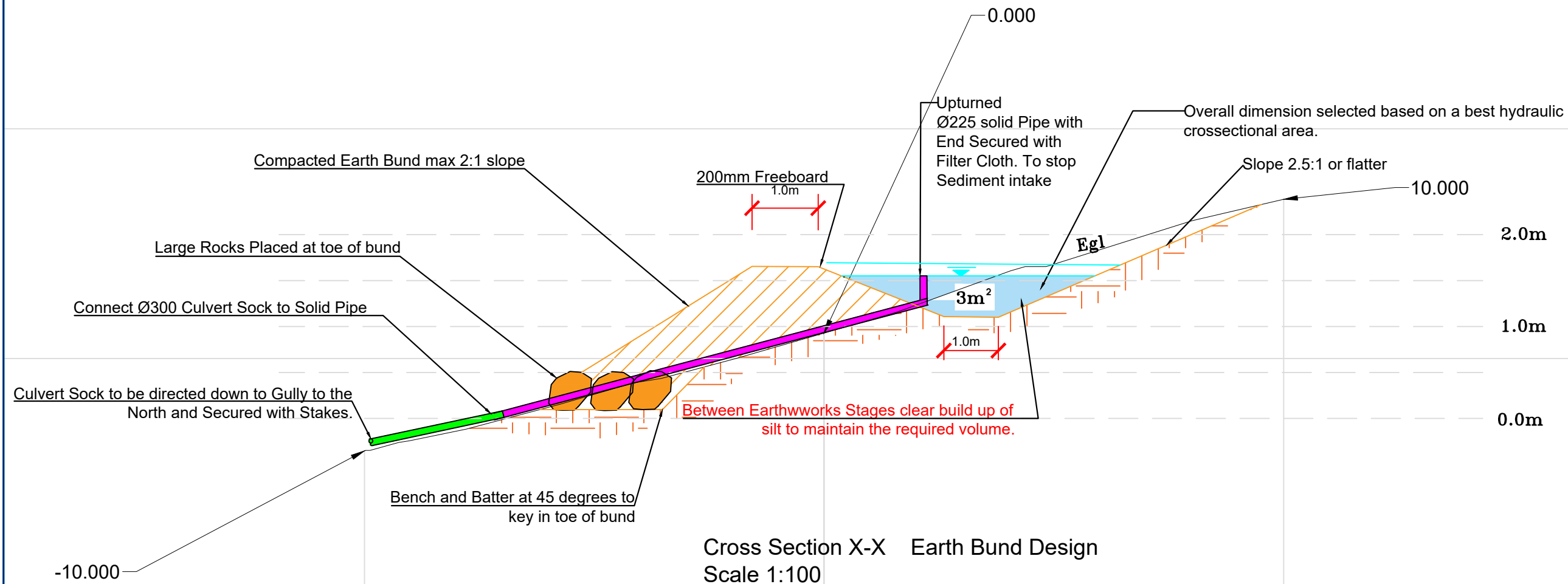
Generated: 2024-12-18 14:48:52
 By user: Jonny White
 Drawing: C:\Users\Jonny White\PK Engineering\Engineering - Documents\Clients\Clients F - JG Gilson, McPhee - 23-038A Lot 4 - Civil 1. A Civil Design Working File\C:\Users\Jonny White\PK Engineering\Engineering - Documents\Clients\Clients F - JG Gilson, McPhee - 23-038A Lot 4 - Civil 1. A Civil Design Working File\23-037 Gilson, M & J Civil.dwg

| Volume Summary | | | | | | | |
|----------------|------|------------|-------------|----------------|-------------|--------------|-------------|
| Name | Type | Cut Factor | Fill Factor | 2d Area (sq.m) | Cut (Cu. M) | Fill (Cu. M) | Net (Cu. M) |
| Building EW | fill | 1.300 | 1.000 | 870.09 | 644.37* | 80.26 | 564.11* |
| Driveway EW | fill | 1.300 | 1.000 | 1458.10 | 772.10* | 8.31 | 763.79* |
| Totals | | | | | | | |
| | | | | 2328.19 | 1416.47* | 88.57 | 1327.90* |

* Value adjusted by cut or fill factor other than 1.0

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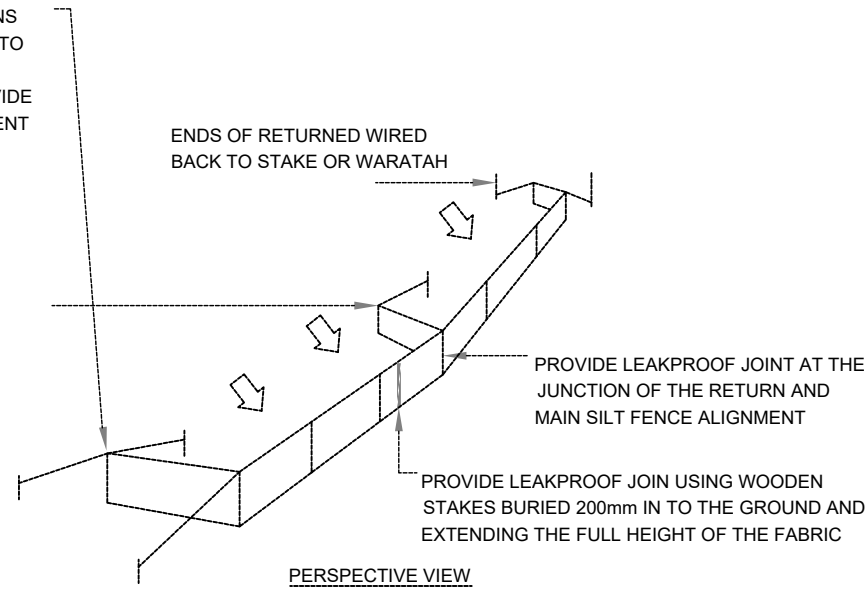
CLIENT: GILSONS, M & J

SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
SILT CONTROL DETAILS A

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
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| AS SHOWN | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
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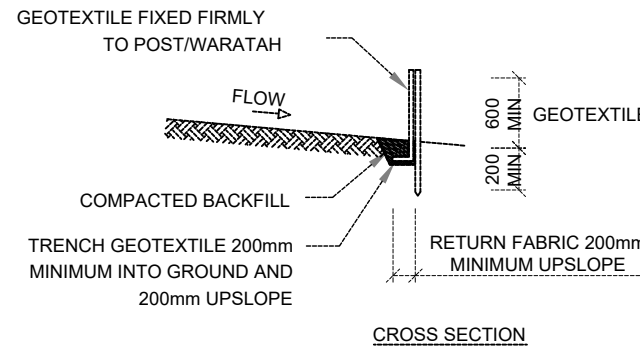
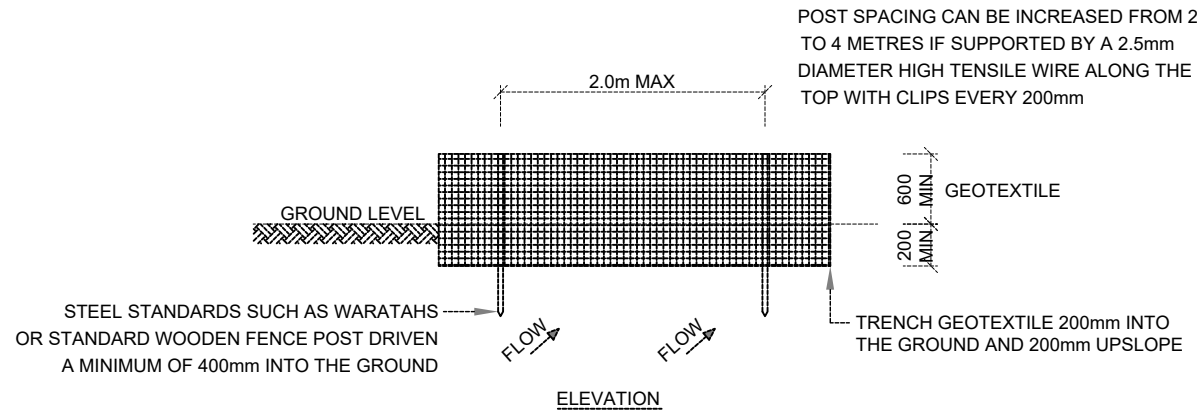
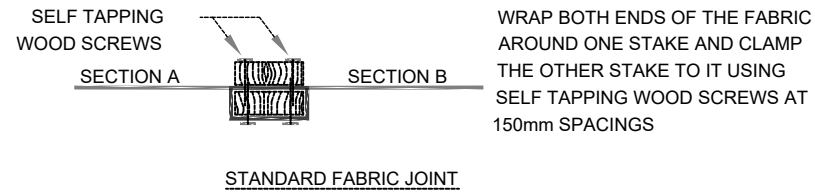
WHERE REQUIRED RETURNS OF 1-3 METRES IN LENGTH TO REDUCE VELOCITY ALONG THE SILT FENCE AND PROVIDE INTERMEDIATE IMPOUNDMENT



SILT FENCE DESIGN CRITERIA:

| SLOPE STEEPNESS % | SLOPE LENGTH (m) (MAX) | SPACING OF RETURNS (m) |
|-------------------|------------------------|------------------------|
| < 2% | N/A | UNLIMITED |
| 2-10% | 40 | 60 |
| 10-20% | 30 | 50 |
| 20-33% | 20 | 40 |
| 33-50% | 15 | 30 |
| >50% | 6 | 20 |

GRAB TENSILE STRENGTH: >440N (ASTM D4632)
 TENSILE MODULUS: 0.140 pa (MINIMUM)
 APPARENT OPENING SIZE: 0.1-0.5mm (ASTM D4751)



SILT FENCE CONSTRUCTION

ENVIRONMENTAL TEMPORARY CONTROL MEASURES

DUE TO THE SIZE OF THE LOT DIVERSION DRAINS ARE NOT REQUIRED. THE CONTRACTOR AND CLIENT TO ADHERE TO FNDC DISTRICT PLAN REGARDING RESIDENTIAL WORK HOURS AND NOMINATED KEY PERSONNEL IN CHARGE OF THE SITE.

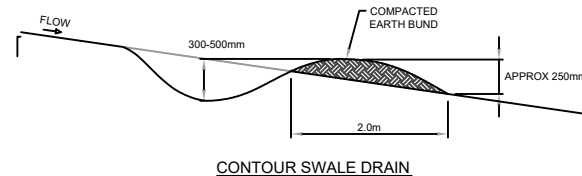
ALL MATERIALS ARRIVING ONSITE ARE TO BE CLEAR OF PEACOCK GARDEN DRIVE AND ANY TEMPORARY ENVIRONMENTAL CONTROL MEASURES ON SITE. ENTRY AND EXITS TO BE CLEARLY MARKED.

ALL EARTHWORKS TO BE DESIGNED AND INSPECTED BY A SUITABLY EXPERIENCED CHARTERED PROFESSIONAL ENGINEER. DUST CREATION IS TO BE KEPT TO A MINIMUM. IN THE EVENT OF DUST,

MITIGATION MEASURES ARE TO BE EMPLOYED. MITIGATION MEASURES ARE TO SUPPRESS THE CREATION OF EXCESS DUST.

ALL TRUCKS ARE TO HAVE TAIL GATES CLEANED AND HUNGRY BOARDS TO BE CLEAR OF DEBRIS PRIOR TO LEAVING SITE. STABILISED ENTRANCE IS TO BE INSTALLED TO MINIMIZE TRACKING DEBRIS ON SITE. SHOULD DEBRIS BE TRACKED ONTO PUBLIC ROADS, A POWER BROOM IS TO BE UTILISED TO REMOVE DEBRIS AND CART TO WASTE. UPON REPEATED INSTANCES OF TRACKING DEBRIS ONTO PUBLIC ROADS THEN WHEEL WASHING SHOULD BE UTILISED.

DIMENSIONS MAY VARY DEPENDING ON SLOPE THIS IS A GENERAL DESIGN



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PK ENGINEERING LIMITED

DATE: 6 12 2024

CHECKED BY: [Signature]

PRADEEP KUMAR
 CHARTERED PROFESSIONAL ENGINEER
 (STRUCTURAL, GEOTECHNICAL)
 InPE, CPEng, MIPENZ No. 203058

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 PO BOX 464, KERIKERI
 Phone Number: 09 407 3255
 Email: teampk@pkengin.co.nz

CLIENT: GILSONS, M & J

SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
 EARTHWORKS DETAILS A

| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
|--------------|-------------|-----------|----------|
| 1:400 | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038A | A3/EW1.2 | 0 | |

STABILISED CONSTRUCTION ENTRANCE SPECIFICATIONS:

APPLICATION

USE A STABILISED CONSTRUCTION ENTRANCE AT ALL POINTS OF CONSTRUCTION SITE INGRESS AND EGRESS WITH A CONSTRUCTION PLAN LIMITING TRAFFIC TO THESE ENTRANCES ONLY. THEY ARE PARTICULARLY USEFUL ON SMALL CONSTRUCTION SITES BUT CAN BE UTILISED FOR ALL PROJECTS.

DESIGN:

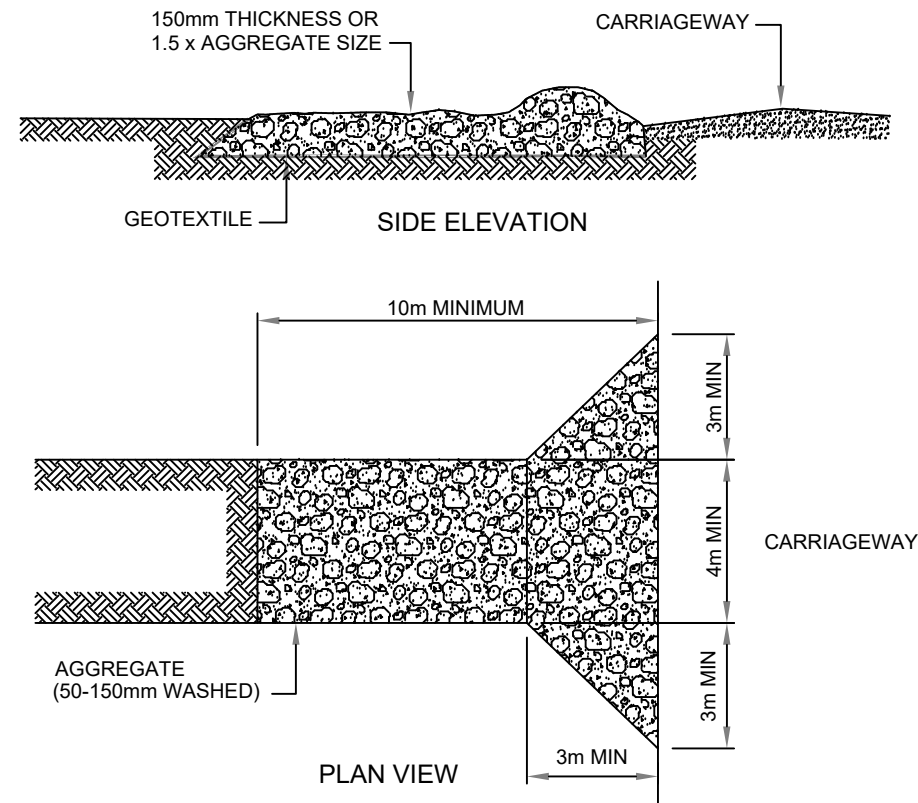
CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS AND OTHER UNSUITABLE MATERIAL AND PROPERLY GRADE IT.

1. LAY WOVEN GEOTEXTILE; PIN DOWN EDGES AND OVERLAP JOINTS.
2. PROVIDE DRAINAGE TO CARRY RUNOFF FROM THE STABILISED CONSTRUCTION ENTRANCE TO A SEDIMENT CONTROL MEASURE.
3. PLACE AGGREGATE TO THE SPECIFICATIONS BELOW AND SMOOTH IT.
4. STABILISED CONSTRUCTION ENTRANCE AGGREGATE SPECIFICATIONS:

| | |
|----------------|---------------------------------------|
| AGGREGATE SIZE | 5-150mm WASHED AGGREGATE |
| THICKNESS | 150mm MINIMUM OR 1.5 X AGGREGATE SIZE |
| LENGTH | 10m MINIMUM LENGTH RECOMMENDED |
| WIDTH | 4m MINIMUM |

MAINTENANCE

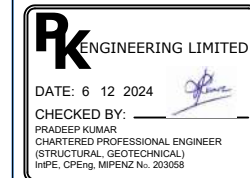
1. MAINTAIN THE STABILISED CONSTRUCTION ENTRANCE IN A CONDITION TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. AFTER EACH RAINFALL INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT FROM THE STABILISED CONSTRUCTION ENTRANCE AND CLEAN OUT AS NECESSARY.
2. WHEN WHEEL WASHING IS ALSO REQUIRED, ENSURE THIS IS DONE ON AN AREA STABILISED WITH AGGREGATE WHICH DRAINS TO AN APPROVED SEDIMENT RETENTION FACILITY.



STABILISED CONSTRUCTION ENTRANCE

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SITE: LOT 4 MATAKA STATION

TITLE: PROPOSED DEVELOPMENT
EARTHWORKS DETAILS C

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| NTS | DEC 2024 | JW | PK |
| PROJECT NO: | DRAWING NO: | REVISION: | |
| 23-038A | A3/EW1.3 | 0 | |

GENERAL

- 1: THIS SET OF DRAWINGS IS TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATION AND ALL OTHER CONTRACT DRAWINGS.
- 2: THE DRAWINGS ARE A DIAGRAMMATIC REPRESENTATION OF THE WORK TO BE CARRIED OUT ONLY AND DIMENSIONS SHALL NOT BE OBTAINED BY SCALING.
- 3: ALL DISCREPANCIES SHALL BE REFERRED TO THE ENGINEER FOR DECISIONS BEFORE PROCEEDING WITH THE WORK.
- 4: THE CONTRACTOR IS TO CONFIRM THE LOCATION AND LEVEL OF ALL UNDERGROUND SERVICES PRIOR TO UNDERTAKING ANY EARTHWORKS OR FOUNDATION CONSTRUCTION.
- 5: ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT CODES OF PRACTICE EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION AND/OR DRAWINGS:
 - NZS 3101:2017 CONCRETE STRUCTURES STANDARD
 - NZS 3109 CONCRETE CONSTRUCTION
 - NZS 3121 WATER AND AGGREGATE FOR CONCRETE
 - AS/NZS 4671 STEEL REINFORCING MATERIALS
- 6: GENERAL ABBREVIATIONS
 - NTS - NOT TO SCALE
 - UNO - UNLESS NOTED OTHERWISE
 - FFL - FINISHED FLOOR LEVEL
 - EGL - EXISTING GROUND LEVEL
 - FGL - FINISHED GROUND LEVEL
- 7: WHERE PROPRIETARY PRODUCTS ARE SPECIFIED IN THE DOCUMENTS THE CONTRACTOR MAY SUBMIT AN ALTERNATIVE PRODUCT FOR APPROVAL AND SUBJECT TO FNDC APPROVAL.
- 8: ALL WORKS ARE TO COMPLY WITH THE HEALTH & SAFETY AT WORK ACT 2015.
- 9: ALL WORKS TO COMPLY WITH THE FAR NORTH DISTRICT COUNCIL (FNDC) ENGINEERING STANDARDS 2023, THE FNDC QUALITY ASSURANCE / QUALITY CONTROL MANUAL VESTED ASSETS, THE FNDC ENGINEERING PLAN APPROVAL LETTER, AND NZS4404:2010.
- 10: FNDC STANDARD DETAILS HAVE NOT BEEN INDEPENDENTLY VERIFIED . WE HAVE ACCEPTED THAT THEY WILL PERFORM FOR THE REQUIRED LIFE EXPECTANCY AS STATED IN THE FNDC EES 2010. WE ACCEPT NO LIABILITY IF THE STANDARD DETAILS DO NOT ACHIEVE THIS DESIGN LIFE.
- 11: FNDC INSPECTIONS REQUIRED IN ACCORDANCE WITH EES, ONLY FNDC APPROVED CONTRACTORS TO WORK ON FNDC RETICULATION (OR THAT TO VEST), REINSTATEMENT, WRITTEN APPROVAL PRIOR TO UNDERTAKING WORKS WITHIN PRIVATE PROPERTY, WORKS ARE TO COMPLY WITH EES, CONTRACTOR IS RESPONSIBLE FOR LOCATING SERVICES PRIOR TO EXCAVATION, AS-BUILT REQUIREMENTS ETC. FNDC TO PROVIDE WRITTEN CERTIFICATION WHERE THEY UNDERTAKE TESTING AND INSPECTION.
- 12: SITE SURVEY, EXISTING SEWER, STORMWATER, AND POTABLE WATER, BASED ON DIGITAL AS-BUILT DATA RECEIVED. COORDINATES ARE IN TERMS OF NZGD 2000 MT EDEN CIRCUIT 2000. VERTICAL DATUM IN TERMS OF NZVD 2016. ALL LEVELS AND CONNECTION POINTS TO BE CHECKED AND CONFIRMED ON SITE PRIOR TO CONSTRUCTION.
- 13: EROSION CONTROL - ALL SILT CONTROL MEASURES SHALL BE PLACED PRIOR TO COMMENCEMENT OF EARTHWORKS. SUCH MEASURES SHALL BE SUBJECT TO FURTHER ADDITIONS AND ALTERATIONS, WHERE CONSIDERED NECESSARY, AS DIRECTED BY THE PROJECT MANAGER OR COUNCIL, DURING THE PROGRESSION OF WORKS. IT IS ADVISED TO CONTACT NRC PRIOR TO COMMENCEMENT OF EARTHWORKS, AFTER INSTALLATION OF EROSION AND SEDIMENT CONTROL DEVICES TO ENSURE THEY HAVE BEEN INSTALLED TO THE SATISFACTION OF NRC.

EARTHWORKS

- E1: ALL PROJECT PAVEMENT SIZES AND DETAILS INDICATED IN THIS DRAWING SET ARE BASED ON A CBR OF 5%.
- E2: ALL SITE EARTHWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF NZS4431. SOIL BEARING CAPACITY IS TO BE VERIFIED UPON COMPLETION OF SITE EARTHWORKS AND DURING FOUNDATION EXCAVATION TO ENSURE ACTUAL SITE CONDITIONS ARE COMPATIBLE WITH THE INFERRED GEOTECHNICAL MODEL. OVER EXCAVATION AND BACKFILLING WITH ENGINEERED FILL OR SITE CONCRETE MAY BE NECESSARY WHERE SOFT SOIL / FILL IS ENCOUNTERED WITH PRIOR VARIATION APPROVAL.
- E3: COMPACTION IN BASE OF PIPE TRENCHES TO ACHIEVE CLEGG 10.

INSPECTIONS / SITE VISITS REQUIRED

- I1: PRE-CONSTRUCTION SITE MEETING WITH CONTRACTOR, ENGINEER AND FNDC PRESENT. NRC TO BE INFORMED OF WORKS ON SITE PRIOR TO COMMENCING WORKS.
- I2: STRIPPED GROUND INSPECTIONS OF ROADS, ROW'S, CROSSING AND SITE FILL AREAS.
- I3: CONTROLLED FILL TESTING TO BRING FILL UP TO SUBGRADE LEVELS TO BE CONSTRUCTED IN 150mm MAX LIFTS AND TESTED EVERY 500mm.
- I4: PAVEMENT LAYERS STRINGING FOR SUBGRADE, SUBBASE, BASECOURSE.
- I5: PAVEMENT LAYERS COMPACTION FOR SUBBASE, BASECOURSE.
- I6: SW TRENCHING AND BACKFILL.
- I7: FINAL INSPECTION WITH, ENGINEER AND CONTRACTOR TO ENSURE ALL WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED ENGINEERING PLANS FOR FINAL SIGNOFF.
- I8: ALL OTHER INSPECTIONS AS REQUIRED IN THE APPROVED INSPECTIONS AND TEST PLAN (ITP). ALL WORKS SHOULD ENSURE THE INSPECTION AND TEST PLAN IS CAREFULLY ACTIONED PRIOR TO PROCEEDING WITH CONSTRUCTION.

ASBUILT CHECKLIST

- AB1: STRIP SURFACE AND UNDERCUT OF UNSUITABLE MATERIAL.
- AB2: SUBGRADE BULK EARTHWORKS.
- AB3: TOPSOIL RESPREAD.
- AB4: STORMWATER PIT AND PIPE NETWORK.

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| | |
|---------|----------------|
| CLIENT: | GILSONS, M & J |
|---------|----------------|

| | |
|-------|----------------------|
| SITE: | LOT 4 MATAKA STATION |
|-------|----------------------|

| | |
|--------|--|
| TITLE: | PROPOSED DEVELOPMENT EARTHWORKS NOTES |
|--------|--|

| | | | |
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| SCALE AT A3: | DATE: | DRAWN: | CHECKED: |
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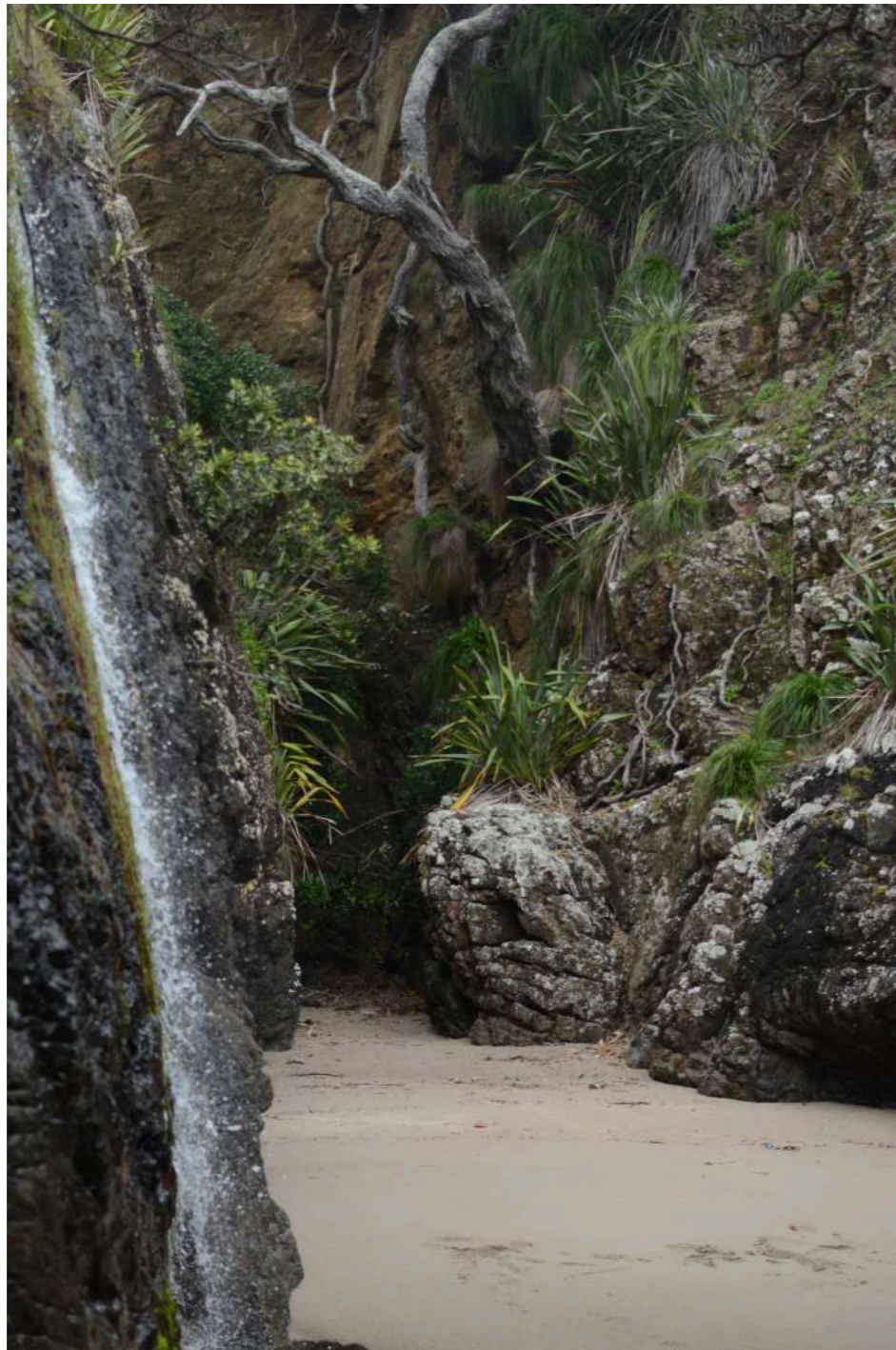


Gilson McPhee

Resource Consent Landscape Design

February 2025

o2landscapes.com



Chionochloa bromoides - Coastal tussock at Mataka Beach



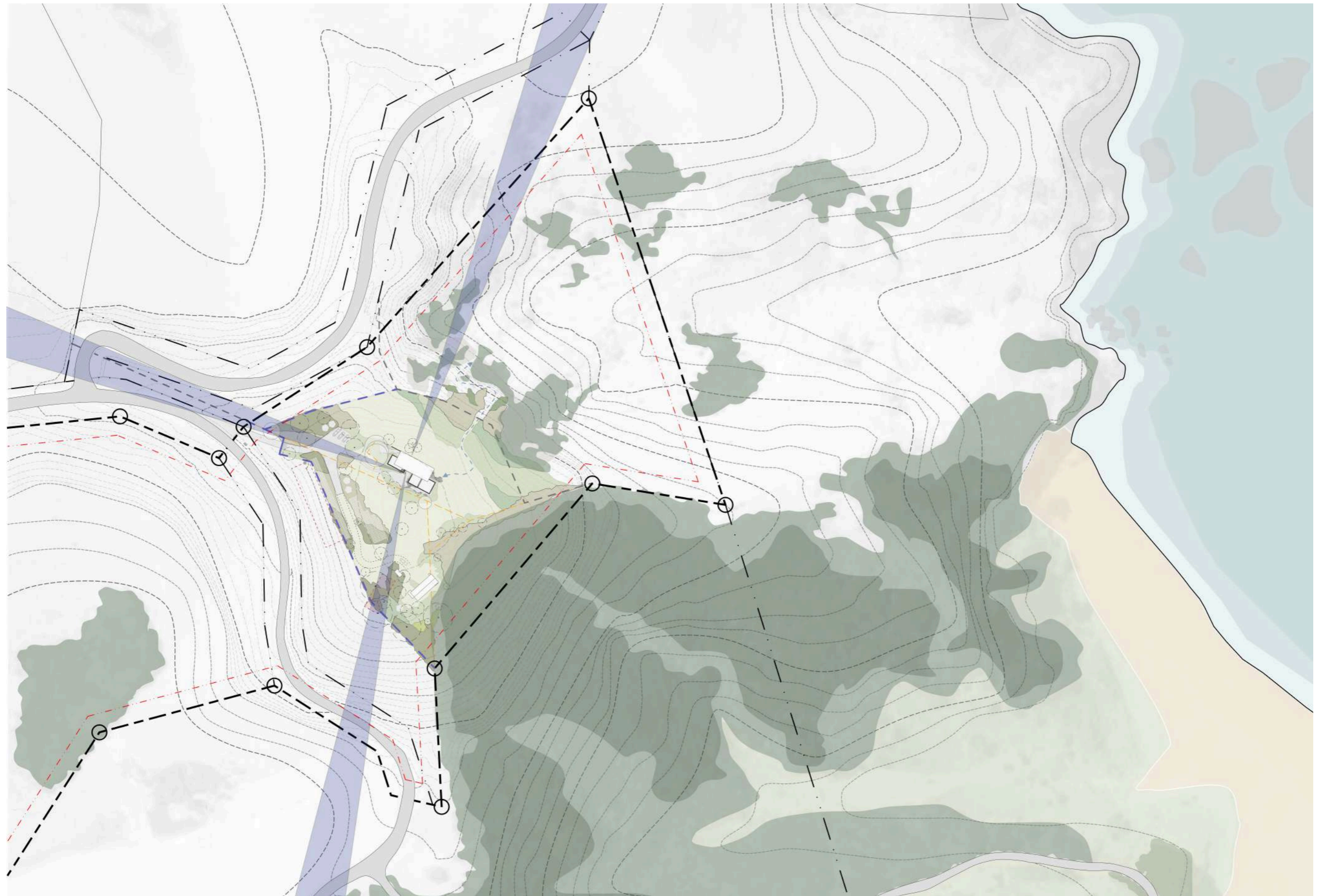
Kunzea robusta - Kanuka woodland



Vegetation patterning in coastal shrubland



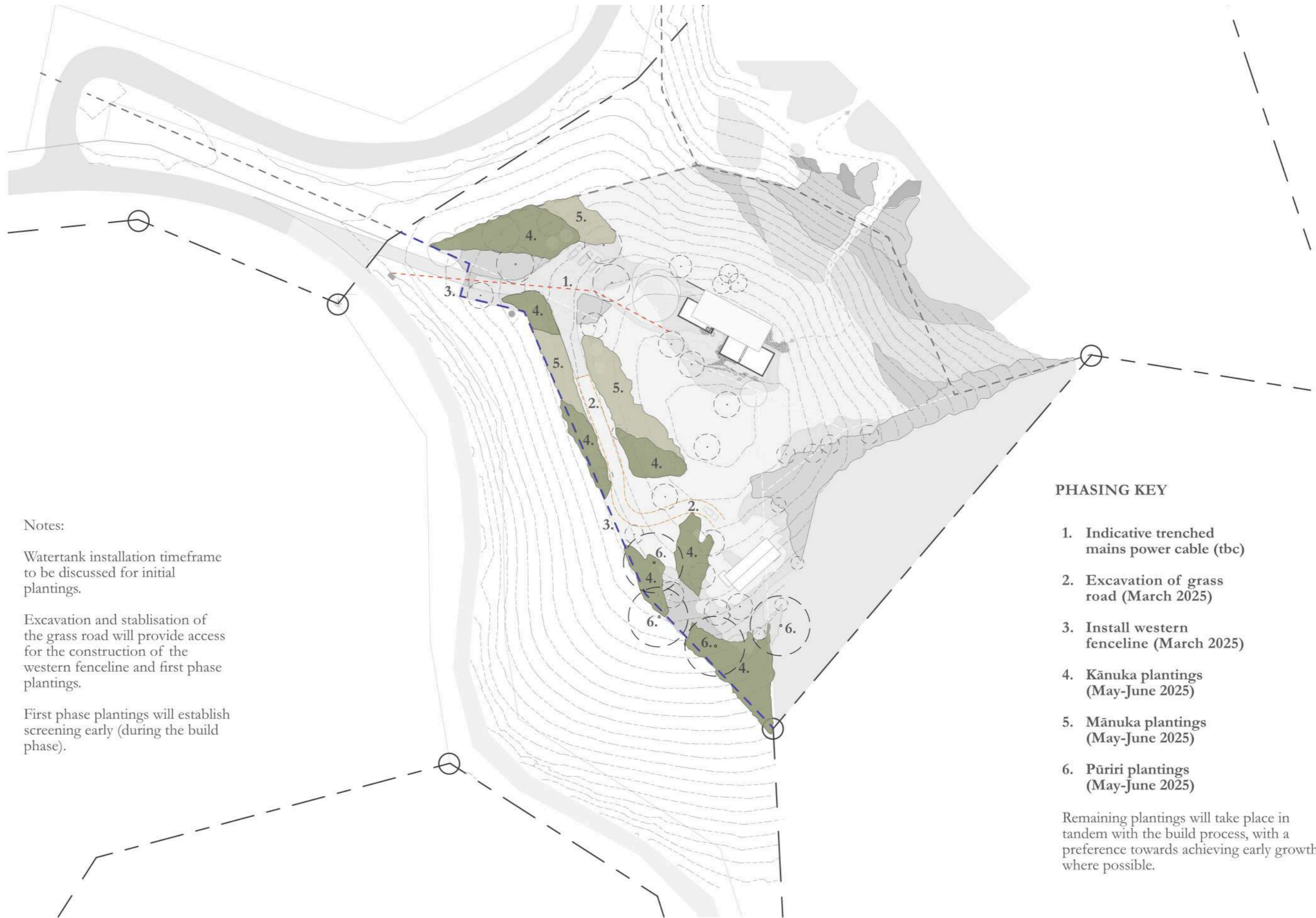
Pastoral landscape - Boyle Residence





| Lt. | Item | Dimensions | Notes |
|-----|----------------------------------|---|---|
| A | L-shaped plinth | 550mm wide and 450mm wide | An l-shaped concrete plinth forms a exit from the house and down to the stone terrace. In-situ concrete wall (BM10 aggregate size), to match concrete finish proposed by architects in exterior built spaces. |
| B | Garden wall and step | 550mm wide and 160mm wide | A concrete wall running perpendicular to the plinth (A) allows the garden to wrap around the building from the south and widens out to become a step parallel to the plinth (A). In-situ concrete wall (BM10 aggregate size), to match concrete finish proposed by architects in exterior built spaces. |
| C | Concrete threshold | 160mm wide | A concrete threshold continues the line of the building out toward the existing pōhutukawa. This forms a low wall and edge to the proposed gravel terrace. In-situ concrete wall (BM10 aggregate size), to match concrete finish proposed by architects in exterior built spaces. |
| D | Stone garden walls | Individual walls 400mm high | Two drystone basalt walls form the edge of vegetable and garden spaces. The two walls create a total level change of 800mm from the gravel below. Stones ranging from 120mm to 300mm in diameter. |
| E | Boulders | Stones ranging from 300mm to 1100mm in diameter | Basalt boulders will be situated within the slope beside the existing Norfolk Pine. Boulders are positioned with 20-30% of their total size visible, with the rest below ground. The desired effect is that of semi-eroded farm hills in the local area. |
| F | Gravel parking | Gravel topcoat (15mm deep) over (90mm deep) GAP20 compacted basecourse. | A gravel parking bay to accommodate three vehicles is proposed west of the house and will be screened by the proposed planting. The gravel type should match the existing surface of farm race within Mataka Station. Final topcoat to be selected in consultation with clients and architects. |
| G | Indicative water tank locations | | Positioned within planted area. |
| H | Septic tank- indicative location | | |
| I | Cattlestop | | A kiwi-safe cattlestop is proposed at the vehicle entry. |
| J | Grass road | | A grass road is proposed as access through to the minor residence. Stabilised soil is recommended. |
| K | Beach track | | An informal grass track leads down to the beach. |
| L | Gravel courtyard | Gravel topcoat (15mm deep) over (90mm deep) GAP20 compacted basecourse. | A courtyard space within garden that is sheltered from northerlies and receives afternoon sun. The edges of the courtyard will merge with the surrounding garden. Gravel topcoat to be selected in consultation with clients and architects. |
| M | Stone terrace | Stones ranging from 120mm to 500mm in diameter | A basalt terrace is proposed to the east of the building. Stone will be laid into concrete above compacted basecourse. Grout will be made from a mix of No. 3 sand and cement (2.5:1), and will be sponged before it has set to expose the coarse aggregate of the river sand. |
| N | Minor residence | | Refer to architects' plans. |

| Lt. | Item | Dimensions | Notes |
|-----|---------------|------------|-----------------------------|
| O | Woodstore | | Refer to architects' plans. |
| P | Septic Field | | Refer to architects' plans. |
| Q | Buffer Zone | | Refer to architects' plans. |
| R | Reserve Field | | Refer to architects' plans. |



Notes:

Watertank installation timeframe to be discussed for initial plantings.

Excavation and stablisation of the grass road will provide access for the construction of the western fenceline and first phase plantings.

First phase plantings will establish screening early (during the build phase).

PHASING KEY

- 1. Indicative trenched mains power cable (tbc)
- 2. Excavation of grass road (March 2025)
- 3. Install western fenceline (March 2025)
- 4. Kānuka plantings (May-June 2025)
- 5. Mānuka plantings (May-June 2025)
- 6. Pūriri plantings (May-June 2025)

Remaining plantings will take place in tandem with the build process, with a preference towards achieving early growth where possible.





PLANTING ZONES KEY

The specifications annotated on this plan indicate the position of both individual specimens and plant communities.

The key below denotes the species belonging to the respective plant communities shown on the plan.

Note: *Ref. planting specifications for corresponding species*

| | |
|------|--------------------------|
| I | 6, 23 |
| II | 5, 12 |
| III | 5, 11 |
| IV | 5, 13, 23 |
| V | 7, 8, 10, 20, 25, 27 |
| VI | 7, 8, 10 |
| VII | 8, 18, 20 |
| VIII | 14, 20, 24, 28 |
| IX | 8, 24, 27, 28 |
| X | 8, 9, 14, 15, 16, 17, 18 |
| XI | 8, 29 |



| No. | Species/variety | Common Name | Bag size (time of planting) | Height after 3-5 years (m) | Height after 10 years (m) | Typical maximum spacing (m) | Notes |
|-----|---|-----------------|-----------------------------------|-------------------------------|------------------------------|-----------------------------------|---|
| 1 | <i>Metrosideros excelsa</i> - Existing | Pōhutukawa | EL45 | 4 | 6 | N/A | Three specimens exist to the west of the proposed building, these will remain and an additional two specimens are proposed to create a larger grove. Pōhutukawa is also positioned at least 1600mm from fenceline to ensure that livestock do not damage these specimens during establishment. |
| 2 | <i>Araucaria heterophylla</i> - Existing | Norfolk pine | N/A | N/A | 7 | N/A | To remain. |
| 3 | <i>Nestegis apetala</i> | Coastal maire | EL45 + EL160 | 4 | 5 | N/A | An attractive small tree of the northern coastline. Now rare on the mainland, it has dark-green, wavy foliage and a branching structure that is similar to pohutukawa, whilst remaining much smaller. This species will contribute in screening the proposed building from any view from Lot 21. 4x specimens at EL160 are to be placed around the minor residence for maximum screening. |
| 4 | <i>Vitex lucens</i> | Pūriri | PB28 | 4 | 6 | N/A | A large native tree with pink flowers and fruits that are loved by birds. This species is naturally regenerating in large numbers along the adjacent coastal embankment. These emergent trees are positioned for screening the building and winds. |
| 5 | <i>Leptospermum scoparium</i> | Manuka | PB3 | 2 | 2.4 | 1.5 | Manuka is proposed where sea views are to be maintained and to extend the pattern of existing manuka in the landscape. Effluent field is proposed within the southwestern manuka plantings. |
| 6 | <i>Kunzea robusta</i> | Kanuka | PB3 | 4 | 6 | 2 (varies) | Kanuka woodland will form the majority of southern plantings and will contribute to shelter and privacy. |
| 7 | <i>Pseudopanax lessonii</i> | Five-finger | PB5 | 3 | 4 | 1.5 | Small coastal tree with bright green, palmate foliage. Proposed throughout low flammability plantings. |
| 8 | <i>Hebe ligustrifolia</i> | | PB5 | 1.5 | 1.5 | N/A | Coastal to woodland species of hebe with pale, yellowish-green foliage and light-mauve flowers that both light up shaded areas. The mauve flowers appear over a long period of time from late winter to early summer. |
| 9 | <i>Myrsine divaricata</i> | Weeping mapou | PB5 | 1.2 | 3 | N/A | Weeping māpou is a small-leaved columnar tree with stiffly weeping branches that bear the character of falling water. Specified in garden above southern courtyard. |
| 10 | <i>Fuchsia procumbens</i> | | PB5 | 0.3 | 0.3 | 0.8 | A creeping groundcover with bright, lime-green leaves; yellow and red flowers in summer, followed by large pink berries. |
| 11 | <i>Clematis paniculata</i> | Puawhangawhanga | PB5 | Climber | Climber | N/A | This forest- and scrub-dwelling <i>Clematis</i> naturally grows through trees on the opposing hillside. Masses of white flowers in summer. |
| 12 | <i>Parsonsia capsulatis</i> var. <i>grandiflora</i> | Native jasmine | PB5 | Climber | Climber | N/A | Native jasmine; white, scented flowers appear in early summer. Planted where it can scramble through manuka. |
| 13 | <i>Cordyline australis</i> | Tī kouka | PB18 | 2.5 | 5 | N/A | Cabbage trees are proposed on the eastern boundary near the guesthouse. An early fruiting source for kereru/kukupā. |
| 14 | <i>Pittosporum pimeleoides</i> subsp. <i>pimeleoides</i> | | PB5 | 1.5 | 1.7 | N/A | A night-scented native shrub from northern headlands, specified as an understory shrub near outdoor living spaces where the scent can be appreciated in the evenings. |

| No. | Species/variety | Common Name | Bag size (time of planting) | Height after 3-5 years (m) | Height after 10 years (m) | Typical maximum spacing (m) | Notes |
|-----|---|-----------------|-----------------------------------|-------------------------------|------------------------------|-----------------------------------|--|
| 15 | <i>Pimelea orthia</i> | Pinatoro | PB5 | 0.2 | 0.3 | 0.9 | Recently described, critically-endangered species of <i>Pimelea</i> . Blue-grey foliage and an upright shrubby form. Specified in garden above southern courtyard. |
| 16 | <i>Chionochloa bromoides</i> | Coastal tussock | PB3 | 0.6 | 0.6 | N/A | Coastal tussock occurs naturally at Mataka Beach on the coastal cliffs. Proposed in plantings that share a relationship to boulders above the courtyard. |
| 17 | <i>Coprosma neglecta</i> - Cape Brett | | PB3 | 0.4 | 0.5 | 0.7 | Lime-green, small-leaved <i>Coprosma</i> that will give structure to plantings within the entry garden. |
| 18 | <i>Adiantum aethiopicum</i> | Maidenhair fern | PB3 | 0.3 | 0.3 | 0.6 | Native fern that forms a soft carpet of lime-green fronds. Specified among boulders beside the existing Norfolk pine. |
| 19 | <i>Sophora chathamica</i> | Kōwhai | PB18 | 3 | 5 | N/A | Kōwhai are positioned on the edge of kanuka woodland zones where the flowering will be conspicuous in spring. |
| 20 | <i>Coprosma rhamnoides</i> | Twiggy coprosma | PB3 | 0.6 | 1 | 0.9 | A compact <i>Coprosma</i> species, which is tolerant of dry shade, and will perform a structural role beneath the existing pōhutukawa. |
| 21 | <i>Coprosma arborea</i> | Mamangi | PB5 | 2 | 3 | N/A | Fine, golden-green leaves with an open, upright habit. To form part of the southern woodland edge. |
| 22 | <i>Melicope ternata</i> | Wharangi | PB18 | 2 | 4 | N/A | A bright, lime green tree that will be planted along the southern woodland edge. |
| 23 | <i>Tetragonia trigyna</i> | NZ spinach | PB5 | 0.3 | 0.4 | 1 | A fast-growing, scrambling native herb that grows at the beach below the property. Planted to help with the establishment of kanuka. |
| 24 | <i>Astelia banksii</i> | Kowharawhara | PB5 | 1 | 1.2 | N/A | Coastal understorey plant which forms silver, flax-like clumps. It is native to volcanic habitats and elsewhere within coastal northern environments (including as an epiphyte). To be planted in close association with existing pōhutukawa trunks. |
| 25 | <i>Todea barbara</i> | Royal fern | PB5 | 1 | 1.2 | N/A | Rare coastal fern of Northland and the Poor Knights, with a form like a cycad. It grows slowly, but can attain a large size with time. Beautiful and distinctive fern of the north, which is threatened by coastal development in some areas. Specified in garden around the guesthouse. |
| 26 | <i>Paesia scaberula</i> | Scented fern | PB5 | 0.4 | 0.4 | 1.5 | A bright, green fern which is currently growing at the north-eastern fenceline on the property. Further plantings are proposed as an extension to this spready native fern to blur the boundary between pasture. |
| 27 | <i>Coprosma parviflora</i> | Tiered coprosma | PB5 | 1.8 | 2.5 | N/A | Small-leaved shrub with a tiered growth form. Endemic to the north of the North Island. To form part of the entry sequence from the carpark. |
| 28 | <i>Dichondra repens</i> | | PB3 | Flat | Flat | 0.6 | Creeping groundcover with kidney-shaped leaves and a pale-green colour. |
| 29 | <i>Leptospermum hoipolloi</i> f. <i>procumbens</i> | Weeping manuka | PB5 | 0.5 | 0.7 | 1 | A cascading form of manuka that produces small white flowers during winter. Planted as a resilient weeping shrub for shading out potential weed species. |

1. *Metrosideros excelsa* - Existing



2. *Araucaria heterophylla* - Existing



3. *Nestegis apetala*



4. *Vitex lucens*



5. *Leptospermum scoparium*



6. *Kunzea robusta*



7. *Pseudopanax lessonii*



8. *Hebe ligustrifolia*



9. *Myrsine divaricata*



10. *Fuchsia procumbens*



11. *Clematis paniculata*



12. *Parsonsia capsulatis* var. *grandiflora*



13. *Cordyline australis*



14. *Pittosporum pimeleoides* subsp. *pimeleoides*



15. *Pimelea orthia*



16. *Chionochloa bromoides*



17. *Coprosma neglecta* - Cape Brett



18. *Adiantum aethiopicum*



19. *Sophora chathamica*



20. *Coprosma rhamnoides*



21. *Coprosma arborea*



22. *Melicope ternata*



23. *Tetragonia trigyna*



24. *Astelia banksii*



25. *Todea barbara*



26. *Paesia scaberula*



27. *Coprosma parviflora*



28. *Dichondra repens*



29. *Leptospermum
hoipolloi* f.
procumbens



Landscape maintenance plan for Lot 4 Mataka Station

This maintenance plan relates to garden areas of the proposed development at Lot 4 Mataka Station. Prior to completion of the planting works, a maintenance contractor must be appointed, for commencement of maintenance immediately following planting.

1. Planting seasons & watering

Sufficient availability of water is required for the establishment period. Plantings are comprised of locally-appropriate species, which will establish well if planted during the optimal planting season - early winter to early spring. Installation of initial screening plantings is proposed for May-June, in line with this.

2. Weed & pest control

Weed & pest control is to be conducted by an appointed maintenance contractor as part of regular maintenance works.

Plantings are to be appropriately protected from pest species; notably rabbits. Tree guards have been specified within the landscape planting specifications. In addition, it may be beneficial to fence larger blocks of planting (for rabbits), where individual tree guards are less practical.

3. Planting technique and maintenance notes

Kanuka (*Kunzea robusta*) and manuka (*Leptospermum scoparium*) will benefit from having 1/4 of their total height reduced at the time of planting, to prevent wind damage and promote vigorous new growth.

In the case of clumping species like *Astelia banksii*, old foliage should be periodically removed from the base of plants to maintain optimal condition. Early suppression of weed species, as well as a focus on good horticultural practice for soil preparation (including conditioning of cut ground, rather than fill) will decrease maintenance requirements from the outset.

Mulch levels should be maintained at adequate coverage during establishment, to suppress weed germination.

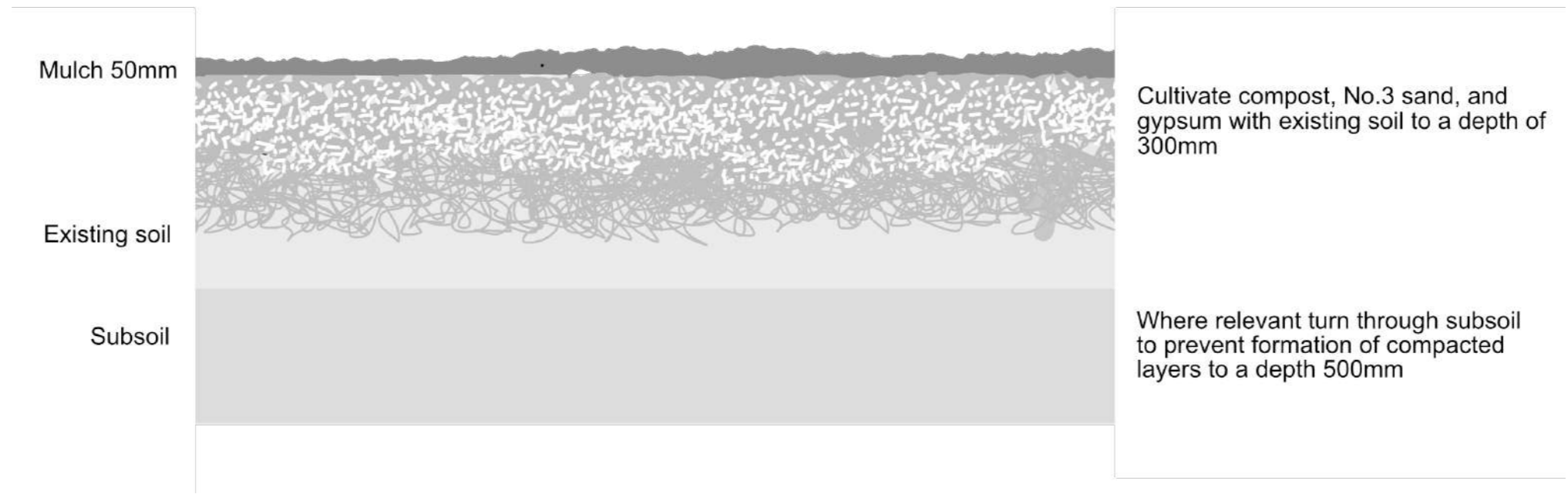
4. Landscape drawings & specifications

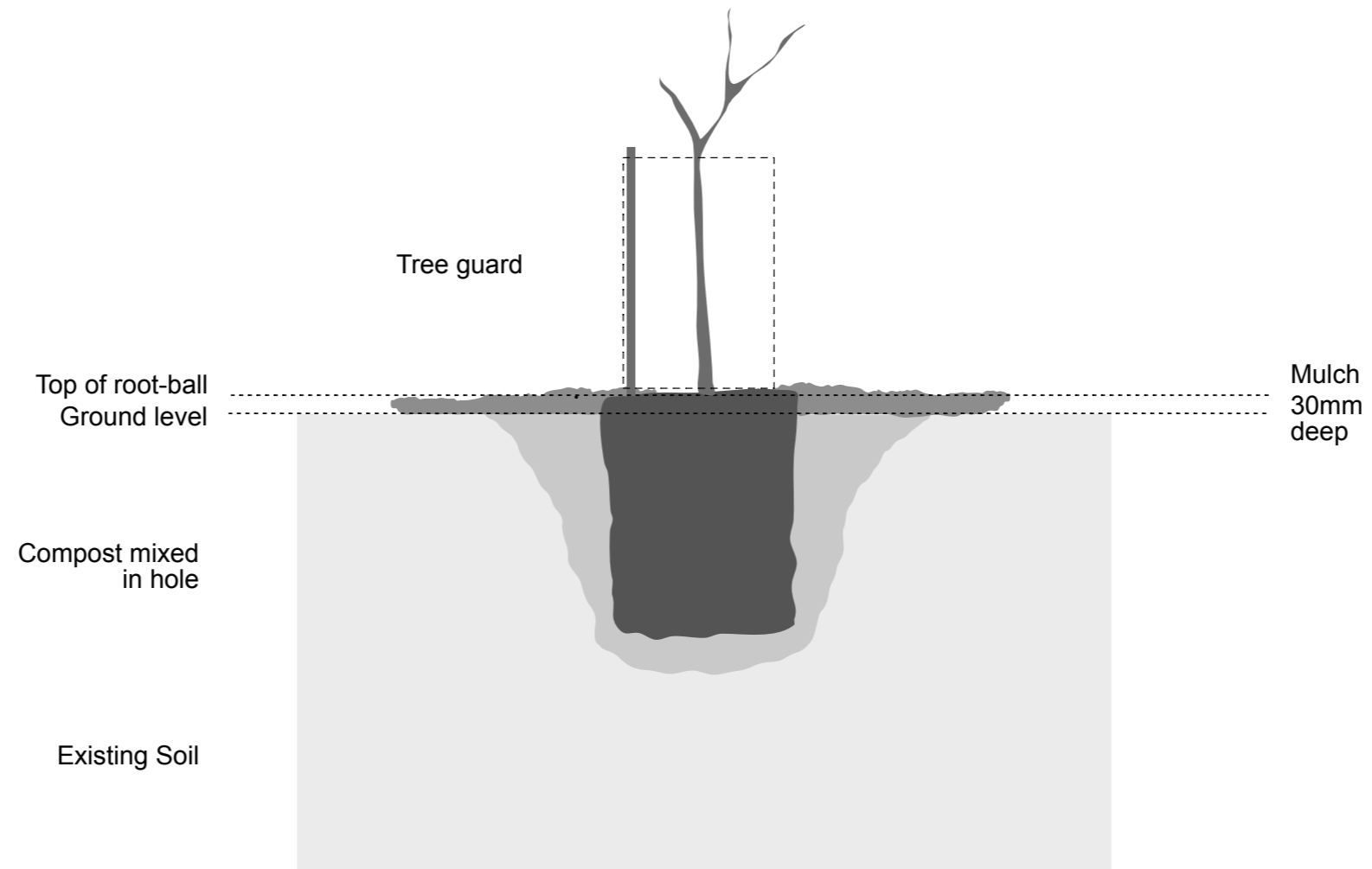
Planting plans are detailed within O2 Landscapes' plans, whilst related details (such as the septic field) are included within Cheshire Architects' (and associated consultants') drawings for building consent.

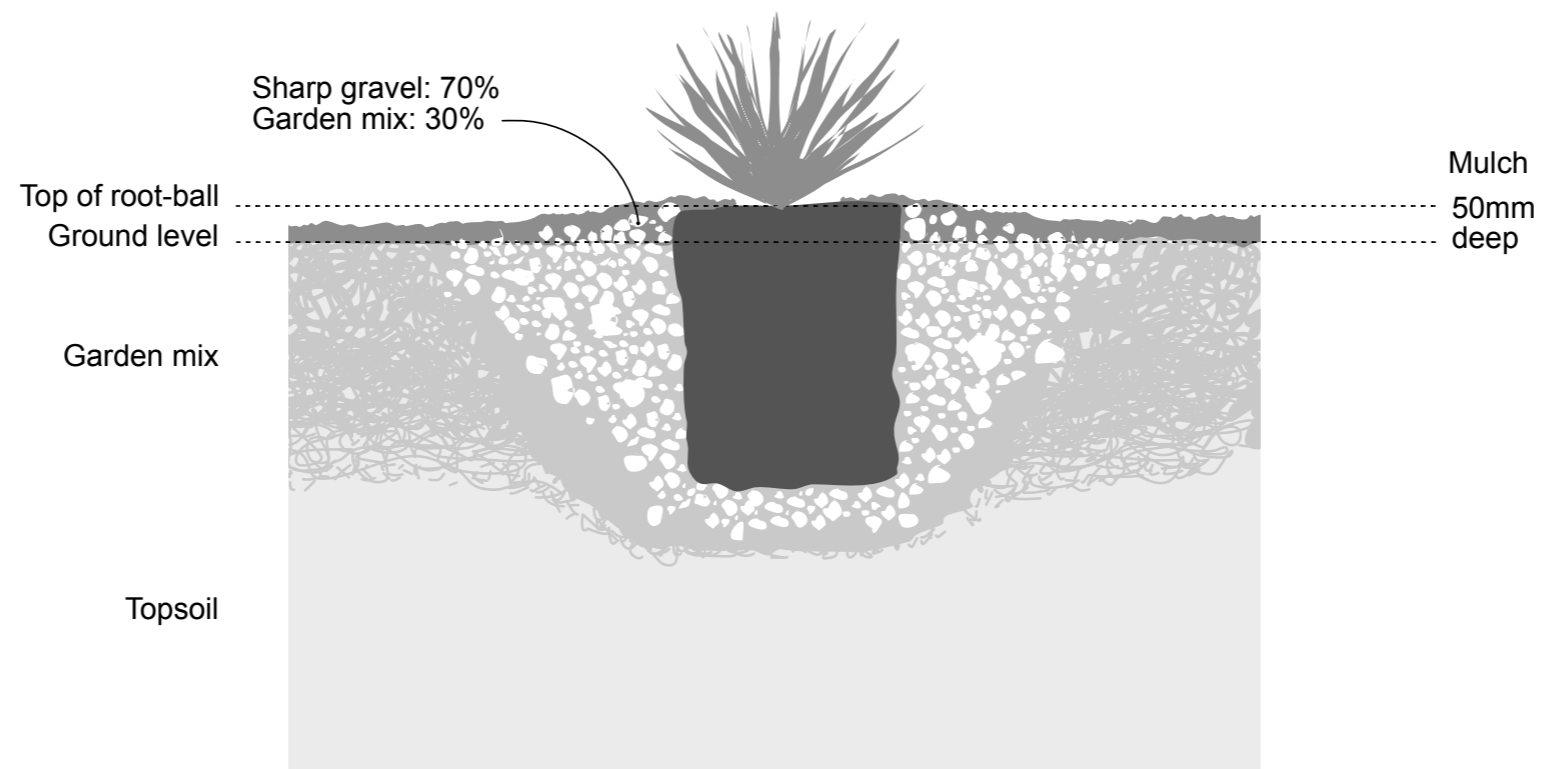
5. Replacement of plants in the period following installation

Any plants that do not survive the initial establishment period should be replaced in the following planting season.

The division between the responsibilities of landscape contractors who will undertake installation works and contractors in charge of ongoing maintenance should be outlined when awarding the contract for landscape installation (and when establishing future maintenance arrangements).







General installation specifications

- Physical copies of O2 landscapes full document set must be present with contractors on-site at all times.
 - Dimensions and marking out of elements within the design are to follow O2 Landscapes plans and detail drawings.
 - Contractors and subcontractors are to confirm all dimensions and levels on site prior to commencing work.
-

PLANTING

P.1 Plant species

It is important that plant; species, subspecies, variety and form are correct, as they form the basis of the design, therefore any substitutions must be confirmed by O2 Landscapes. Examples of plant names follow: *Mazus novaezeelandiae* subsp. *impolitus* f. *hirtus* **Genus: *Mazus* species: *novaezeelandiae* subspecies (subsp.) : *impolitus* forma (f.) : *hirtus* variety (var.) : *hesperia***

P.2 Plant layout and placement, including spacings

The placement of plants is an integral part of the design and the way that space is structured. At the time of planting, plant layout needs to be co-ordinated with O2 Landscapes as part of site observation, in order to ensure that the design intent is carried out to the requisite level. Plants must be placed out and planted according to their positions in the planting plans, unless services or hard structures below ground interfere. Spacings are to be confirmed onsite with the designers as part of plant layout. Where plants are indicated as individual specimens, they should conform to the plans. Where there are groupings of plants, spacings indicated within documentation represent a typical maximum spacing. Throughout the design, spacings may vary (based on design intent), and the maximum spacings are not to be applied uniformly. These are only provided for species that are multi-planted.

P.3 Planting level

Planting practice is to be undertaken to a high horticultural standard. It is the responsibility of contractors to achieve the correct planting level. Unless stated otherwise, the top of the root ball/base of trunk should be planted 20mm above the finished soil level (with mulch covering 30mm, such that surface roots are lightly covered). Refer to standard planting specifications drawing within landscape package.

P.4 Mulching

It is the responsibility of contractors to mulch plants and trees in the correct manner, mulch should be kept at least 30mm away from a plants' trunk, stem or base. Finished levels need to ensure that crown/collar rot will not occur. Refer to standard planting specifications drawing within landscape package.

P.5 Staking

It is the responsibility of contractors to ensure that plantings can withstand strong winds. All plants in 30L/PB28 pots or equivalent size must be staked with 50mm hardwood stakes. Shrubs or small trees that are 600-1000mm tall must be staked with 20mm hardwood stakes. Where pest animals are of concern, tree guards or selective fencing must be discussed with O2 Landscapes.

P.6 Plant orders

Some species may be available from a limited range of sources or specified from locally-sourced stock. It is extremely important that orders for plants are placed 6-9 months prior to installation, or that plants are secured by the successful landscape contractor within this time period. Any species that the successful contractor is unable to order at an early stage must be itemised at least 4 months prior.

MATERIALS

M.1 Finishes

For confirmation of material finishes, refer to the layout specifications.

M.2 Built landscape

Concrete, grout and mortar are to be mixed with ratios and materials stated in the layout specifications. Samples are to be agreed with clients prior to instalation.

Lot 4 Proposed Dwelling, Mataka Station

Landscape Effects Assessment
Prepared for Michael Gibson and Joan McPhee



20 January 2025





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Cover photograph: Photo of Lot 4 Building site from drone

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Appendices

Appendix A: Method Statement

Appendix B: Graphic Supplement (bound separately)

Appendix C: Pererua Peninsula - Wairoa Bay to Rocky Point and
Related Islands landscape unit worksheet

1.0 Introduction and Background

Michael Gibson and Joan McPhee has engaged Boffa Miskell Ltd (BML) to undertake a landscape effects assessment (LEA) of a proposed new dwelling and associated vehicle access parking and landscaping. The development will be located on Lot 4 DP323083, which is 57.418 hectares (ha), one of 26 approved house site lots situated at the end of Oihi Road on the Purerua Peninsula, Northland within an approximately 1,150ha property managed as a farm park. (Refer to **Figure 1** of Appendix B for a map of the Mataka Station Property).

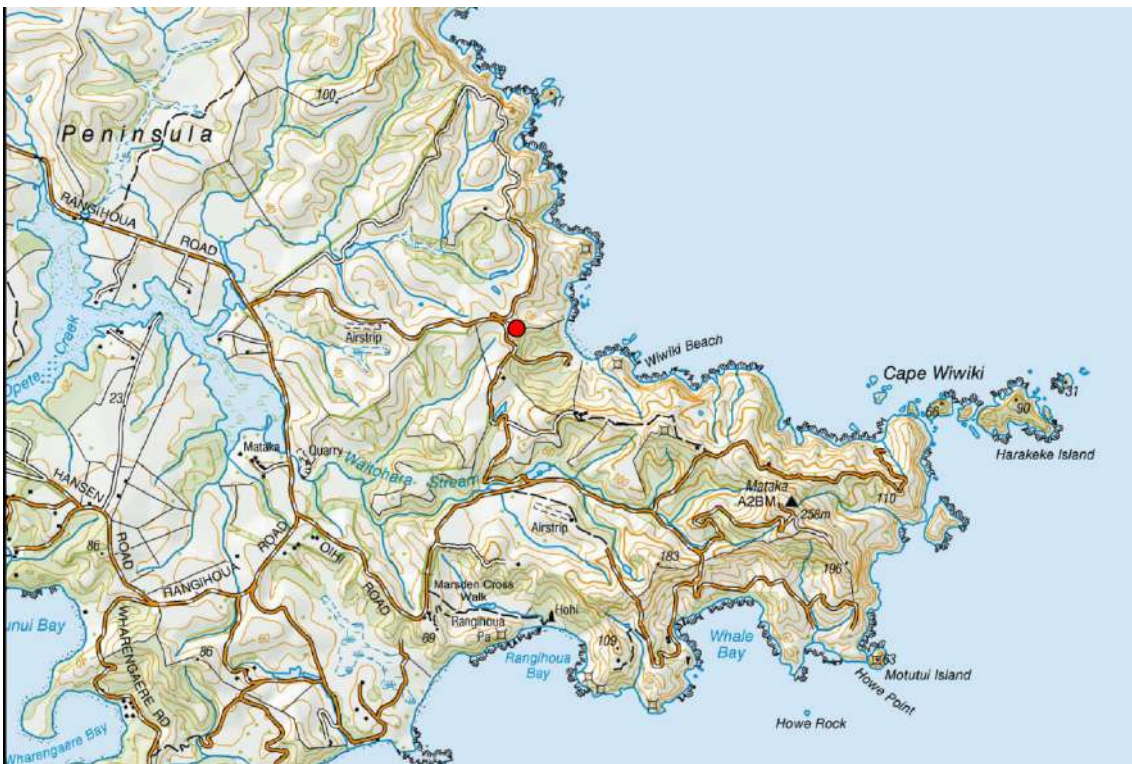


Plate 1: Lot 4 Site location

The majority of Lot 4 is located within the more inland part of the property to the west of the main internal north-south access road, with approximately 4ha to the northeast identified as a “Designated House Site” on the title plan (“Site”). The designated house site¹ for this lot was identified and assessed as part of a Visual Assessment² prepared as part of the subdivision and landuse consent in 2000. This Site is largely oriented towards the northern eastern coastal side of the peninsula, separated from the Coastal Marine Area (CMA) by Lot 3. The inland part of lot contains a mix of productive pastoral farmland and indigenous forest, while the Site contains a mixture of grazing land, regenerating coastal shrubland a specimen trees. (Refer to **Figure 1** and **2** of **Appendix B**)

This assessment is consistent with the methodology (high-level system of concepts, principles, and approaches) of ‘Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment

¹ DP 320383 Title Plan.

² Mataka Visual Assessment prepared by D.J. Scott and Associates Limited November 2000.

Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022. A Method Statement is attached as **Appendix A** to this report.

This landscape effects assessment has considered the proposal in the context of the existing environment, the zoning and use of the land surrounding the Site and the relevant planning framework. While the adjacent Lot 3 is located within the General Coastal Zone in the Far North District Plan – Operative (FNDP(O)), Lot 4 is outside this zone, and beyond the Outstanding Landscape Overlay which follows the lower slopes of the coastal environment. As such Lot 4 including the Site which contains the nominated building area is located within the rural zone.

In both Northland Regional Policy Statement (NRPS) and the Far North Proposed District Plan (FNPDP) the area east of the ridge which separates the coast from the inland area is within the Coastal Environment (CE). The building area is located within the CE but outside the identified Outstanding Natural Landscape (ONL) Overlay and the High Natural Character (HNC) Area identified within the NRPS and the FNPDP. (Refer to **Figure 3** of **Appendix B**)

The proposal has been reviewed by the Design Review Committee (DRC) on behalf of the Mataka Residents Association and approval given by the MRA for the proposal to be submitted for resource consent.

2.0 Existing Environment

The wider landscape within and surrounding Lot 4 has a predominantly large scale rural coastal character. Apart from the designated building Site areas which are located on the title plans for each lot the balance of the land in this northeastern part of Mataka Station is characterised by either steep coastal slopes and escarpments to the east of a defining north south ridge system rolling pastoral farmland and indigenous bush / pine forest to the west.



Plate 2: Looking north along main dividing ridge separating coastal slopes from inland farmland

The Lot 4 designated building Site straddles a localised knoll (up to 120.5m above sea level (asl)) which is part of a north south oriented ridge which generally follows the access road to the lots in this northern part of Mataka Farm. The landform around the knoll has relatively gentle slopes, approximately 1 vertical in 3 horizontal (1:3), with the balance of the designated house Site area around the knoll at slopes of approximately 1:2. Further towards the coast and Lot 3 the land falls away more steeply. These slopes and the geotechnical constraints on site result in a relatively restricted practical buildable area within the designated house Site identified on the title plan.

The landscape is expansive along the ridge with 360° views from the top of the knoll within the designated building Site. Views to both the wider seascape and to the productive farmland are afforded. This includes views to the southeast which include Mataka Mountain, Harakeke Island and the “Nine Pin”, and beyond to Cape Brett. To the north the views extend across rolling pastoral hill country towards Takou Bay and beyond. Due to its elevated location the Site is relatively exposed to winds from all quarters.



Plate 3: Views from the designated building Site southeast

The Site contains two existing Norfolk Island Pines – one at approximately 7m high located near the top of the knoll at RL102m, and the other approximately 10m high located near the western boundary of the designated building Site and lot boundary. In addition, there is a cluster of 3 semi-mature Pohutukawa up to approximately 11m high located between the pines. The balance of the designated building Site contains pasture grasses and this area is currently grazed as part of the farming operation. Beyond the designated building Site area east towards the coast there is a mix of rank grass and regenerating coastal shrubland, while to the west the majority of the balance of the 57ha lot and those adjacent are utilised for grazing as part of the farming operation.



Plate 4: Designated building area with existing Norfolk Pines and Pohutukawa and rural farmland beyond

3.0 Background Landscape Assessments

Far North Landscape Assessment

The 1995 Far North Landscape Assessment³ was undertaken to assess the landscape values of the district in order to inform objectives, policies, and management strategies to enable the District Council to meet its obligations under Part V of the RMA. The assessment delineated the district into 112 landscape units which each display homogeneous and consistent landscape character, derived from topography, vegetation and landscape character and the relationship with the sea. The units were separated into coastal and terrestrial and grouped into 19 landscape categories which display a reasonable consistency of landscape character. The Mataka property contains two landscape units as follows:

- Coastal Unit C16: Poraenui Point to Black Rocks which is identified as “Exposed rocky coastline”; and
- Terrestrial Unit T32: Purerua Peninsula which is identified as “Gently undulating pasture / scrub”.

Exposed rocky coastline (Coastal Unit C16)

The assessment report states:

“These units are distributed along the east coast of the district and share a rugged, rocky coastline. The exposure of the units to the periodic pounding by big seas leaves a craggy shore of eroded bedrock. Much of the shore covered by this category is backed by cliffs which attest further to the power of the ocean. Vegetation tends to be stunted and kept well inland in these severe conditions. Pohutukawa are the dominant trees within the units, although frequently rather scattered in their distribution and somewhat dwarfed by the harsh conditions. Built development is extremely limited, with only a few farmhouses or baches to be found within the composite units of this category.”

Of the 5 landscape units in this coastal category 4 were identified as Outstanding with high sensitivity ratings – this includes C16 around the coastal edge of the property. Characteristic of the units that contribute to their high ratings are:

- The rugged and dynamic relationship between land and sea.
- The ever-changing range of sea conditions to be found around these units, extending from placid, clear waters in calm periods, to pounding, turbulent swells.
- A predominant sense of remoteness and naturalness.
- The extremely limited intrusion by built development experienced around these portions of the coast.
- The convoluted alignment of the coast, with small promontories and rocky embayment’s bringing a sense of mystery and anticipation.

The above extracts from the 1995 landscape assessment provides relevant context to the Lot 4 Site and surrounding landscape. However, neither Lot 4 nor the designated building Site are within the Outstanding Landscapes.

³ Far North Landscape Assessment 1995, prepared for Far North District Council by LA4 Landscape Architects

Northland Regional Mapping Project

The NRC commissioned a comprehensive study to identify and map the landward extent of the coastal environment, high and outstanding natural character areas in the coastal environment, and outstanding natural features and landscapes to enable the Council to fulfil its responsibilities under the New Zealand Coastal Policy Statement 2010, and to provide a resource to assist with the development of a new Regional Policy Statement. This resulted in three separate reports one identifying the extent of the coastal environment, another delineating outstanding and high natural character areas and the third identifying outstanding natural features and outstanding landscapes in the region.

Based on these studies the NRC has identified the majority of the seaward facing topography within the Mataka Station property, generally up to the top of the first ridge, as being within the Coastal Environment (CE), with the majority of the slopes below being classified as an Outstanding Natural Landscapes. Within Lot 4 the CE generally follows the ridge line across the top of the knoll and effectively bisects the designated building Site.

Areas within the coastal environment that contain intact indigenous vegetation are identified as having High Natural Character (HNC). The ONL worksheet states that ONL's

“are deemed to be those units of landscape which most strongly display natural science, aesthetic and experiential characteristics, and are prominent in the landscape, lending them a sense of spectacle and unity with a minimum of development or modification”.

As described in the NRPS the coastal environment of the Mataka Farm property is located in the Pererua Peninsula - Wairoa Bay to Rocky Point and Related Islands landscape unit. A description, characterisation and evaluation of this unit is outlined in the assessment worksheet which is attached as **Appendix C**.

The landscape characterisation states that this is *“A very powerful and substantial headland form that acts as a landmark over a large inland area and area of coast. Serves as the northern gateway to the Bay of Islands, and Kerikeri/Te Puna inlets. When seen from a distance, Purerua has a very simple, bold signature comprising the loom of the landmass overlaid with a simple pastoral cover. In summer that grassland dries off to a very graphic golden colouring. When seen from closer locations, a level of detail in both landform and vegetation patterns become clear. So too do the scattered dwellings and related access tracks that have been developed on the site as part of a management plan subdivision that commenced approximately a decade ago.*

The coastal margin of the peninsula is convoluted and diverse, with sequences of small bays and coves, caves, narrow reefs and small islands standing just clear of the rocky shore. A notable cluster of islands is strung off of Cape Wiwiki at the apex of the peninsula, including the well-know Ninepin Island. These feature dramatic forms and, being isolated for a history of pastoral use that has prevailed on the nearby mainland, are in a much more intact and natural state.

The main body of the peninsula tends to be sheered where it meets the sea, leaving elevated rocky cliffs and bluffs dropping to the water. Typical terrain over this unit eases little from those coastal cliffs, being very steep and fragile, with numerous areas of slipping and erosion scars, particularly in association with access tracks. Restorative planting associated with the Mataka subdivision are steadily converting many of the steepest coastal flanks into native shrubland from their former pastoral cover.

The coast in this area typically features very clear, dark blue ocean waters. It is also subject to severe sea conditions, as demonstrated by the extensive faces of bare rock that rise from sea level in the most exposed areas.”

This is consistent with the landscape character of the coastal environment where it is the coastal edge that provides the defining elements and patterns with the elevated pastoral farmland beyond providing a backdrop to this feature. Consistent with other parts of the unit, inland areas also contain some plantation forestry and areas of indigenous forest generally in gullies and on steeper slopes.

Similar to the 1995 landscape assessment it is the lower slopes below Lot 4 (i.e. within Lot 3) that are delineated as outstanding with all bar a small area of the designated building Site which is contiguous with an area of indigenous regenerating shrubland identified as an area of High Natural Character outside of any landscape overlays.

As depicted in **Figure 3 of the Graphic Supplement** the main house and minor dwelling lie just within the CE line and are located outside the Outstanding Landscape and HNC area.

Based on the site plan there will not be any direct impact resulting from the proposal on any of the overlay areas delineated as Outstanding Landscape or HNC. All development associated with the proposal is located outside these areas.

4.0 Relevant Statutory Planning Context

A detailed description of the application’s planning context (including the statutory and non-statutory provisions) that provide the framework for assessing the proposal is provided in the AEE prepared by Barker and Associates Ltd. This section summarises the key provisions relevant to landscape, visual and natural character assessment matters that have informed this assessment.

Resource Management Act 1991

Part 2 of the RMA (1991) sets out the purpose and principles of the Act. Section 5 states that the purpose of the RMA is to promote the sustainable management of natural and physical resources. Section 6 sets out the matters of national importance that must be recognised and provided for in achieving the purpose of the RMA.

The preservation of the natural character of the coastal environment (including the coastal marine area), and its protection from inappropriate subdivision, use and development is identified as a matter of national importance in Section 6(a). As outlined above the majority of the coastal facing slopes within the Mataka property is within the coastal environment, including part of the designated building Site within Lot 4, and much of the coastal edge, is identified as an Outstanding Landscape with HNC as outlined above in Section 3.

The protection of Outstanding Natural Features (“**ONF**”) and Outstanding Natural Landscapes (“**ONL**”) from inappropriate subdivision, use and development is identified as a matter of national importance in Section 6(b). As outlined above the two buildings are located outside the area classified as an ONL in the FNDP(O) and the RPS.

Section 7 identifies a range of matters that shall be given particular regard to in achieving the purpose of the RMA. Of relevance to this proposal is section 7(c) the maintenance and

enhancement of amenity values. This is considered in this report in relation to potential effects on views and visual amenity as provided in **Section 6.2**.

The New Zealand Coastal Policy Statement 2010

The purpose of the NZCPS is to state the policies in order to achieve the purpose of the Act in relation to the coastal environment of New Zealand. The NZCPS therefore includes a number of policies which are relevant to this proposal, given the proposal's location within the coastal environment, adjacent to areas of HNC and within an ONL. The policies which are considered particularly relevant to this assessment are Policies 13, 14 and 15, as detailed below:

Policy 13 Preservation of natural character

To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:

- (a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and*
- (b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment...*

Policy 14 Restoration of natural character

Promote restoration or rehabilitation of the natural character of the coastal environment, including by:

- (a) identifying areas and opportunities for restoration or rehabilitation.*

Policy 15 Natural features and natural landscapes

To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development:

- (a) avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and*
- (b) avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment.*

Northland Regional Policy Statement 2016

The NRPS contains a number of objectives and policies that apply to the coastal environment in relation to natural character and outstanding landscapes. These objectives and policies are largely consistent with Policies 13, 14 and 15 of the NZCPS as in Objectives 3.14 and 3.15 below. The NRPS also provides guidance on the methods that might be applied to achieve these objectives as set out in Policy 4.6 below.

Objective 3.14 Natural character, outstanding natural features, outstanding natural landscapes and historic heritage

Identify and protect from inappropriate subdivision, use and development;

- (a) *The qualities and characteristics that make up the natural character of the coastal environment and the natural character of freshwater bodies and their margins;*
- (b) *The qualities and characteristics that make up outstanding natural features and outstanding natural landscapes;*

Objective 3.15 Active management

Maintain and / or improve;

- (a) *The natural character of the coastal environment and fresh water bodies and their margins;*

Policy 4.6.1 Managing effects on the characteristics and qualities natural character, natural features and landscapes

(1) *In the coastal environment:*

- (a) *Avoid adverse effects of subdivision use, and development on the characteristics and qualities which make up the outstanding values of areas of outstanding natural character, outstanding natural features and outstanding natural landscapes.*
- (b) *Where (a) does not apply, avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of subdivision, use and development on natural character, natural features and natural landscapes. Methods which may achieve this include:*
 - i. *Ensuring the location, intensity, scale and form of subdivision and built development is appropriate having regard to natural elements, landforms and processes, including vegetation patterns, ridgelines, headlands, peninsulas, dune systems, reefs and freshwater bodies and their margins; and*
 - ii. *In areas of high natural character, minimising to the extent practicable indigenous vegetation clearance and modification (including earthworks / disturbance, structures, discharges and extraction of water) to natural wetlands, the beds of lakes, rivers and the coastal marine area and their margins; and*
 - iii. *Encouraging any new subdivision and built development to consolidate within and around existing settlements or where natural character and landscape has already been compromised.*

(3) *When considering whether there are any adverse effects on the characteristics and qualities of the natural character, natural features and landscape values in terms of (1)(a), whether there are any significant adverse effects and the scale of any adverse effects in terms of (1)(b) and (2), and in determining the character, intensity and scale of the adverse effects:*

- a) *Recognise that a minor or transitory effect may not be an adverse effect;*
- b) *Recognise that many areas contain ongoing use and development that: (i) Were present when the area was identified as high or outstanding or have subsequently been lawfully established (ii) May be dynamic, diverse or seasonal;*
- c) *Recognise that there may be more than minor cumulative adverse effects from minor or transitory adverse effects; and*

- d) *Have regard to any restoration and enhancement on the characteristics and qualities of that area of natural character, natural features and/or natural landscape”.*

Far North District Plan - Operative

Lot 4 and the designated building Site is within the Rural Production Zone. As such the application for resource consent is a permitted activity. The key matters for consideration from a landscape perspective are:

- i. *That development which will maintain or enhance the amenity value of the rural environment and outstanding natural features and outstanding landscapes be enabled to locate in the rural environment. (Policy 8.4.4);*
- ii. *The maximum height of any building shall be 12m (Permitted Activities 8.6.5.1.8);*

Summary of Statutory Matters

In summary the above statutory documents contain landscape related provisions that require an assessment of natural character, landscape, and visual amenity. These matters are addressed below and are summarised in Section 6 below.

5.0 Proposal Description

The proposal is set out in the “Lot 4: Mataka Station RC Submission” prepared by Cheshire Architects and the Landscape Plans prepared by O2 Landscapes. These packages of drawings and illustrations contain a design statement, site plans, floor plans, elevations, sections, and illustrative renders of the buildings as well as landscape planting plans, a species list, with size at planting and approximate height of planting at 3-5 years and maturity. These drawings are referenced below in relation to the description of the proposal.

In summary, the proposal contains two building elements – a main house and a minor dwelling. The main house is located on the northern side of a knoll which forms one of a series of high points along a north-south oriented ridge which separates the coastal environment from the inland rural landscape. The high point of the knoll is RL102.5m above sea level (asl) and the main house floor level is designed at RL100.6m, 1.9m below the high point of the knoll. The minor dwelling is to be located to the southeast of the high point of the knoll with a floor level of 98.2m, some 4.3m below the top of the knoll.

A description of the main and minor dwellings is provided in the Design Statement as part of the Cheshire Architects drawings. The main dwelling has a floor area of 245m² and the minor dwelling 52m². The drawing package includes an outline of the external cladding materials which are provided in an Outline Specification. For both dwellings the proposal includes:

- Roof: Dark Grey Zincolume – LRV=25%
- Guttering and Spouting: Weathered Copper – LRV=9%
- Exterior Wall Cladding: Western Red Cedar Weatherboards – 18%

All external cladding materials will be below an LRV of 30%.

As depicted in the Cheshire Site Plan access to the development is from a right of way easement to the west. This access extends into the Site to a small carpark area with a walking track / cart path providing access to the main house and the minor dwelling.

The dwelling is well within the 15m height limit for the rural production zone and also within the 8m maximum height limit set for the General Coastal Zone. While the buildings are not within the Coastal zone, they meet the height and LRV standards for buildings within this zone.

5.1 Landscape Plan

The landscape design for the Site, prepared by O2 Landscapes, contains a mix of indigenous trees, shrubs, and groundcover suitable for this coastal Site. Large grade specimen trees include *Metrosideros excelsa* (Pohutukawa), *Nestegis apelata* (Coastal Maire), and *Vitex lucens* (Puriri). These will be supplemented with a range of hardy quick growing indigenous trees such as *Leptospermum scoparium* (Manuka) and *Kunzea robusta* (Kanuka). Within 3-5 years it is anticipated that the specimen trees and Kanuka will be approximately 4m high and after 10 years between approximately 6 and 7m high.

6.0 Assessment of Effects

Landscape and visual effects result from natural or induced change in the components, character, or quality of the landscape. Usually these are the result of landform or vegetation modification or the introduction of new structures, facilities, or activities. All these impacts are assessed to determine their effects on the character, quality, and visual amenity of the area surrounding the Site and the potential for effects on public and private views.

6.1 Landscape Effects

Landscape effects relate to changes in the physical nature of a site or locality and can occur whether they are seen or not.

The introduction of the proposal into the landscape cannot occur without a change to the existing physical composition of the Site and its overall built landscape character. The suitability of this proposal depends on the context, the proposed design / character and materiality of the buildings and the avoidance of significant adverse effects on the surrounding environment, particularly high value areas.

6.1.1 Physical Landscape Effects

The proposed development will be constructed within the open grass area of the Site. Any vegetation targeted for removal comprises pasture and rank grass.

The proposed development will require some limited and tightly contained excavation to form the new driveway, building and garden / lawn areas. As a result, there will be some changes to the existing contour, however the overall nature of the landform including its natural high point will be maintained. Retaining up to 1m high will be used to form garden walls to the southern courtyard – these will utilise naturally weathered or stained timber.

During construction and earthworks there will be some disruption to the landform and grass landcover within the Site and this will result in a temporary adverse landscape effect visible from the surrounding area, including from the CMA. Overall, it is considered that the level and extent of the earthworks is in keeping with what can be expected for a new residential dwelling within an approved building Site.

Extensive planting is proposed as part of the application, as depicted in the Landscape Plan. This includes indigenous specimen tree and shrub planting as outlined above. This planting will integrate the proposal into the landscape, provide a consistent and high amenity treatment to the Site, enhancing its amenity. It is considered that the proposed planting will result in beneficial landscape effects as it will relate to and connect with existing regenerating coastal indigenous shrubland.

Due to the earthworks and the limited amount of grassland vegetation being removed, as well as taking in to account the proposed vegetation, and design of the buildings in relation to the landform, the physical effects of the proposal on the subject Site is assessed as **low** (adverse) with some positive effects occurring as part of the proposed planting.

6.1.2 Landscape Character Effects

Landscape character is derived from the distinct and recognisable pattern of elements that occur consistently in a particular landscape. It reflects particular combinations of geology, landform, soils, vegetation, land use and features of human settlement. It creates the unique sense of place defining different areas of the landscape.

The inclusion of the main and minor dwelling, and proposed planting will reduce the current open character of the Site however, this is an expected outcome as a residential dwelling is anticipated and provided for in this location on Lot 4. The placement of this new built form has been selected to avoid impacting the existing Norfolk Island Pines and Pohutukawa trees and to allow space between the two buildings below the top of the knoll, thereby avoiding any potential for the two structures to create a single mass. The buildings have also been located to enable further revegetation to link with the existing coastal shrubland within the Site and the adjacent Lot 3 coastal escarpment. The overall scale of the buildings is appropriate in the context of the site and wider landscape context.

The proposal will not result in the removal of any significant vegetation and along with the proposed comprehensive planting on the Site will successfully integrate the development within the surrounding landscape and further strengthen the vegetation patterns throughout the area.

With the above in mind, it is considered that the proposal will have **low-moderate** adverse landscape character effects on the surrounding landscape.

6.2 Visual Effects

Visual effects relate to the degree of change that may occur to public views and amenity as a result of changes to the landscape and landscape character. In this instance, visual impacts may occur due to the introduction of additional built form in the landscape.

With reference to **Figure 1: Landscape Context** and **Figure 2: Site Context** it can be seen that there is a limited public viewing audience for this proposal. Any publicly available views will be afforded from the CMA to the east while views from the west are from within Mataka Station.

When seen from the CMA, the amount of building visible will depend on the distance of views from the coastal edge as the foreground topography and vegetation limits views of the full height of the main house and minor dwelling. From more distant locations while more of the buildings may be visible these are seen within a greater expanse of coastline and includes existing built development within the Mataka property. Where visible, neither of buildings form a dominant element in the view, relative to the scale provided by the coastal escarpment and large topographical landform.

In addition, the location of the buildings to the north and east of the knoll, along with planting to the southwest will in time ensure that the proposal has an additional vegetated context in views from the CMA to the east; and will provide a foreground to private views from other existing dwellings and building sites within the Mataka subdivision to the south and west.

From the CMA and surrounding landscape, the overall adverse visual effects of the proposal is considered to be **low**. (Refer to Visual Simulations **VS1A** and **VS1B**; and **VS2A** and **VS2B** in the **Appendix B Graphic Supplement**).

6.3 Effects in Relation to Statutory Provisions

The analysis of the relevant landscape and visual amenity provisions is discussed below with reference to the assessment of effects outlined in the above sections of this report. A full assessment of the statutory provisions is provided in the application AEE.

Natural Character

The proposed location of the buildings and associated landscape development has been designed to avoid any existing indigenous vegetation which has been identified in the NRPS as having HNC. Proposed planting of indigenous tree and shrubland species adjacent to the existing HNC area will in time enhance the natural character of this part of the Mataka coastal environment, by expanding an area of intact coastal bush. While the introduction of two buildings within this rural / coastal landscape will result in further modification to this pastoral farming landscape the proposal overall is expected to result in beneficial effects on natural character due to the extensive revegetation proposed.

Landscape

The designated building Site is beyond the ONL identified in the FNDP(O) and the NRPS and is located within a Rural Production zone. The height of the buildings meets the standards for the zone and as such the proposal is a permitted activity. The proposal is however located within the Coastal Environment as delineated in the NRPS and as outlined in the NZCPS significant adverse effects are to be avoided, remedied, or mitigated. As outlined above the buildings are small in scale and low in height (c.f. to the permitted standard) and are constructed using naturally weathering materials with low reflectivity. This along with the proposed planting which will assist to further integrate the buildings into the coastal environment will ensure that any adverse effects are no more than minor. Given that Lot 4 has a designated building Site the development is anticipated, and the scale and character of the design will be appropriately integrated.

Visual Amenity

Due to the location of Lot 4 and the building site the public viewing audience is limited to the CMA. As outlined above any adverse effects resulting from the development are considered to be less than minor in nature given the existing landscape and landform context, the distance and nature of the views, the scale and nature of the development and the proposed revegetation.

7.0 Summary and Conclusions

Lot 4 at Mataka Station was created through an approved subdivision in 2003 and 2005, resulting in a number of large rural lifestyle lots on the southern end of the Puruerua Peninsula. As part of the subdivision process and associated Visual Assessment a Designated Building Site was identified for each lot.

This Site is located within a rural zone and outside the Outstanding Landscape overlays in the relevant territorial plans. The building site and proposal straddles the Coastal Environment boundary delineated in the NRPS and the proposed buildings each have a coastal aspect. The design of the buildings has been cognisant of the coastal landscape context and have been located and designed to ensure they can be well integrated into the Site and wider landscape. This has been achieved through siting below a localised high point (knoll) on the Site, retaining existing trees and shrubland on the Site, designing the buildings to a modest size with low height and using natural materials with low reflectivity suitable for this rural / coastal landscape. Furthermore, the planting of indigenous trees and shrubs will provide a backdrop to the buildings when viewed from the CMA, while offering a foreground perspective for views from the inland areas of the farm, including from existing dwellings and proposed building sites.

Acknowledging the sensitive nature of site within the coastal environment it is considered that the proposal is well considered and will result in no more than minor adverse effects on the natural character, landscape and visual amenity of the Site and wider landscape. Over time as the indigenous planting matures any remaining adverse effects will become less than minor and beneficial effects will ensue due to the revegetation that will effectively nestle the built forms into the Site.

In summary it is considered that the proposal for Lot 4 at Mataka will result in an appropriate outcome, given its landscape context, the location and design of the proposed development and the landscape treatment, including planting, for the Site.

Appendix A: Method Statement

This assessment method statement is consistent with the methodology (high-level system of concepts, principles, and approaches) of 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022. The assessment provides separate chapters to discuss landscape, visual and natural character effects where relevant, but is referred to throughout as a Landscape Effects Assessment in accordance with these Guidelines. Specifically, the assessment of effects has examined the following:

- *The existing landscape;*
- *The nature of effect;*
- *The level of effect; and*
- *The significance of effect.*

The Existing Landscape

The first step of assessment entails examining the existing landscape in which potential effects may occur. This aspect of the assessment describes and interprets the specific landscape character and values which may be impacted by the proposal alongside its natural character where relevant as set out further below. The existing landscape is assessed at a scale(s) commensurate with the potential nature of effects. It includes an understanding of the visual catchment and viewing audience relating to the proposal including key representative public views. This aspect of the assessment entails both desk-top review (including drawing upon area-based landscape assessments where available) and field work / site surveys to examine and describe the specific factors and interplay of relevant attributes or dimensions, as follows:

Physical –relevant natural and human features and processes;

Perceptual –direct human sensory experience and its broader interpretation; and

Associative – intangible meanings and associations that influence how places are perceived.

Statutory and Non-Statutory Provisions

The relevant provisions facilitating change also influence the consequent nature and level of effects. Relevant provisions encompass objectives and policies drawn from a broader analysis of the statutory context and which may anticipate change and certain outcomes for identified landscape values.

The Nature of Effect

The nature of effect assesses the outcome of the proposal within the landscape. The nature of effect is considered in terms of whether effects are positive (beneficial) or negative (adverse) in the context within which they occur. Neutral effects may also occur where landscape or visual change is benign.

It should be emphasised that a change in a landscape (or view of a landscape) does not, of itself, necessarily constitute an adverse landscape effect. Landscapes are dynamic and are constantly changing in both subtle and more dramatic transformational ways; these changes are both natural and human induced. What is important when assessing and managing landscape

change is that adverse effects are avoided or sufficiently mitigated to ameliorate adverse effects. The aim is to maintain or enhance the environment through appropriate design outcomes, recognising that both the nature and level of effects may change over time.

The Level of Effect

Where the nature of effect is assessed as ‘**adverse**’, the assessment quantifies the level (degree or magnitude) of adverse effect. Assessing the level of effect entails professional judgement based on expertise and experience provided with explanations and reasons. The identified level of adverse natural character, landscape and visual effects adopts a universal seven-point scale from **very low** to **very high** consistent with Te Tangi a te Manu Guidelines and reproduced below.



Landscape Effects

A landscape effect relates to the change on a landscape’s character and its inherent values and in the context of what change can be anticipated in that landscape in relation to relevant zoning and policy. The level of effect is influenced by the size or spatial scale, geographical extent, duration and reversibility of landscape change on the characteristics and values within the specific context in which they occur.

Visual Effects

Visual effects are a subset of landscape effects. They are consequence of changes to landscape values as experienced in views. To assess where visual effects of the proposal may occur requires an identification of the area from where the proposal may be visible from, and the specific viewing audience(s) affected. Visual effects are assessed with respect to landscape character and values. This can be influenced by several factors such as distance, orientation of the view, duration, extent of view occupied, screening and backdrop, as well as the potential change that could be anticipated in the view as a result of zone / policy provisions of relevant statutory plans.

Natural Character Effects

Natural Character, under the RMA, specifically relates to ‘*the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development*’. Therefore, the assessment of natural character effects only involves examining the proposed changes to natural elements, patterns and process which may occur in relevant landscape / seascape contexts.

As with assessing landscape effects, the first step when assessing natural character effects involves identifying the relevant physical and experiential characteristics and qualities which occur and may be affected by a proposal at a commensurate scale. This can be supported through the input of technical disciplines such as geomorphology, hydrology, marine, freshwater, and terrestrial ecology as well as input from tāngata whenua. An understanding of natural character considers the level of naturalness and essentially reflects the current condition of the environment assessed in relation to the seven-point scale. A higher level of natural character means the waterbody and/or margin is less modified and vice versa.

A natural character effect is a change to the current condition of parts of the environment where natural character occurs. Change can be negative or positive. The resultant natural character effect is influenced by the existing level of naturalness within which change is proposed; a greater level of effect will generally occur when the proposal reduces the naturalness of a less

modified environment. In short, the process of assessing natural character effects can be summarised as follows:

- Identify the characteristics and qualities which contribute to natural character within a relevant context and defined spatial scale(s), including the existing level of naturalness;
- Describe the changes to identified characteristics and qualities and the consequent level of natural character anticipated (post proposal); and
- Determine the overall level of effect based on the consequence of change.



The Significance of Effects

Decision makers assessing resource consent applications must evaluate if the effect on individuals or the environment is less than minor⁴ or if an adverse effect on the environment is no more than minor⁵. For non-complying activities, consent can only be granted if the s104D 'gateway test' is satisfied, ensuring adverse effects are minor or align with planning objectives. In these situations, the assessment may be required to translate the level of effect in terms of RMA terminology.

This assessment has adopted the following scale applied to relevant RMA circumstances⁶ (refer to diagram below), acknowledging low and very low adverse effects generally equate to 'less than minor' and high / very high effects generally equate to significant⁷.



⁴ RMA, Section 95E

⁵ RMA, Section 95E

⁶ Seven-point level of effect scale. Source: Te tangi a te Manu, Pg. 15

⁷ The term 'significant adverse effects' applies to specific RMA situations, including the consideration of alternatives for Notices of Requirement and AEEs, as well as assessing natural character effects under the NZ Coastal Policy Statement.

Appendix B: Graphic Supplement (bound separately)

Figure 1: Mataka Station Property

Figure 2: Landscape Context

Figure 3: Site Context

Viewpoint Location Plan and Visual Simulations

Appendix C: Pererua Peninsula - Wairoa Bay to Rocky Point and Related Islands landscape unit worksheet

Northland Regional Landscape Assessment Worksheet

| | Unit name – PURERUA PENINSULA – WAIROA BAY TO ROCKY POINT & RELATED ISLANDS |
|---|---|
| DESCRIPTION AND CHARACTERISATION | |
| Component | Comment |
| Land Types <small>(refer to list overleaf)</small> Coastal cliffs / escarpment Bays and headlands Beach Reefs and islands | <p>A substantial peninsula, typically steep-sided and with a bluffed, rocky coastline prevailing. Apex elevation at Mt Pocock – which is very close to the seaward end of the peninsula is 258m.</p> <p>Small islands a particular feature of Wairoa Bay and Cape Wiwiki areas. Includes sandy beaches at either end of the unit, although these are atypical of the prevailing theme of coastal character.</p> |
| Geology <small>(including geopreservation sites)</small> | Valleys and coastal hillslopes in hill country of Waipapa Group greywacke. |
| Soil Types | Marua light brown clay loam, Te Ranga steepland soils, light brown clay loam and sandy clay loam. |
| Ecology <small>(including protected vegetation / features, PNAP Level 1 and 2 sites)</small> | <p>Mainland part of ONL has areas of manuka/kanuka shrubland with occasional puriri, cabbage tree and gorse. Scattered pohutukawa and hardwood associations in small gully pockets.</p> <p>Purerua Peninsula has some of the highest number of kiwi calls per hour recorded in Northland. The shrubland areas are important for kiwi and the nearby wetland areas (outside of this ONL) are potentially important for spotless crane, bittern and fernbird.</p> <p>The area supports several threatened and regionally significant species of shore and wetland birds, and is a representative site for manuka shrubland.</p> <p>Wiwiki group of islands include flax and pohutukawa commonly dispersed. Kanuka, hangehange, houpara, bracken, cutty grass, and coastal astelia are frequent. Cabbage tree, kawakawa, karaka, coastal tussock, rengarenga lily, toetoe, rushsp and gorse are occasional.</p> <p>Islands are a representative site for flax, one of only three examples in the Ecological District of taupata dominance, and the only site representing houpara dominance and pohutukawa-houpara association. The island closest to the mainland (Harakeke Is.) displays a diverse forest including coastal maire, a relatively uncommon species, and prostrate kowhai. Tikitiki Island is an unmodified mainly bare island but habitat for several threatened bird species.</p> |
| Archaeological sites | Abundance of sites found along coastal brink and flanks relating to the shoreline. Sequence of pa sites on headlands around Howe Point and Rangihoua Bay. Visible terraces elsewhere on coastal spurs. |
| Heritage Landscapes | Nationally important memorial and site contained within the Marsden Cross Historic Reserve. Long history of pastoral farming preceded by native forestry. |

Landscape characterisation

(including the identification of any specific characteristics)

A very powerful and substantial headland form that acts as a landmark over a large inland area and area of coast. Serves as the northern gateway to the Bay of Islands, and Kerikeri/Te Puna inlets. When seen from a distance, Purerua has a very simple, bold signature comprising the loom of the landmass overlaid with a simple pastoral cover. In summer that grassland dries off to a very graphic golden colouring. When seen from closer locations, a level of detail in both landform and vegetation patterns become clear. So too do the scattered dwellings and related access tracks that have been developed on the site as part of a management plan subdivision that commenced approximately a decade ago.

The coastal margin of the peninsula is convoluted and diverse, with sequences of small bays and coves, caves, narrow reefs and small islands standing just clear of the rocky shore. A notable cluster of islands is strung off of Cape Wiwiki at the apex of the peninsula, including the well-know Ninepin Island. These feature dramatic forms and, being isolated for a history of pastoral use that has prevailed on the nearby mainland, are in a much more intact and natural state.

The main body of the peninsula tends to be sheered where it meets the sea, leaving elevated rocky cliffs and bluffs dropping to the water. Typical terrain over this unit eases little from those coastal cliffs, being very steep and fragile, with numerous areas of slipping and erosion scars, particularly in association with access tracks. Restorative planting associated with the Mataka subdivision are steadily converting many of the steepest coastal flanks into native shrubland from their former pastoral cover.

The coast in this area typically features very clear, dark blue ocean waters. It is also subject to severe sea conditions, as demonstrated by the extensive faces of bare rock that rise from sea level in the most exposed areas.

EVALUATION

| Criteria | Rank | Comment |
|--|------|--|
| Natural Science Factors | | |
| Representativeness Natural landscapes are clearly characteristic of the area, district or region. The key components of the landscape will be present in a way that defines the character of the place and distills its character and essence. Endemic associations. | 4 | One of the defining landscapes for this part of the coast and inland terrain. Acts as a defining pillar to the northern edge of the Bay of Islands. Has high kiwi habitat values and associated offshore islands are noted for their ecological values. |
| Rarity Natural features are unique or rare in the region or nationally, and few comparable examples exist. | 3 | Relative rarity is hinged on species found on remote coast and associated offshore islands. Overall, the coastal landform and profile of Purerua relates to the distinctive loom of Mataka and relatively small pockets of ecology, rather than a broader pattern. |
| Aesthetic Values | | |
| Coherence The patterns of land cover and land use are largely in harmony with the underlying natural pattern of the landform of the area and there are no significant discordant elements of land cover or land use. | 4 | Unified primarily by the consistent form and parent materials of the majority of the coastal flank. Vegetation patterns assist in some areas and restorative planting on Mataka Station will assist further as they develop. |
| Diversity & Complexity The elements contributing to overall landscape character are diverse and complex (particularly in ecological terms) without creating disharmony. | 4 | Coastline configuration, small islands and rocky coastal flanks all contribute. Overall – and only partially within the ONL - the simple, bold character of the main landmass is somewhat lacking in these qualities as a result of intensive pastoralism, |
| Vividness Natural features and landscape are widely recognized across the community and beyond the local area and remain clearly in the memory; striking | 5 | Evocative and powerful, with the Cape Wiwiki, Harakeke Island and Tikitiki Rock (The Ninepins) being particularly vivid. |

| | | |
|--|----------|--|
| landscapes are symbolic of an area due to their recognisable and memorable qualities. | | |
| <p>Naturalness</p> <p>How affected by human activity is the landscape? Does human activity intrude on the landscape? Eg.</p> <ul style="list-style-type: none"> • Presence of buildings and associated built development. • Presence of infrastructure services. • Extent of indigenous forest cover. • Homogeneity of exotic vegetation. • Presence / extent of modified agricultural land use. • Strength of natural processes / ecological patterns. • Unmodified and legible physical relief and landform. • Presence of water. | 3 | <p>Whilst the majority of the unit is in an “unbuilt” state, adjacent parts of the land have been developed for housing. Those structures tend to be large and the access drives to reach them are typically accompanied by scarring of the clay soils.</p> <p>Vegetation patterns are limited in terms of current expression, although planting on the subdivision will add to that natural extent and create broader sweeps that are more in scale with the landform.</p> <p>The coastal margin and flanks embodied in the ONL are considered to be the most intact parts of the broader site.</p> |
| <p>Intactness</p> <p>Natural systems are intact and aesthetically coherent and do not display significant visual signs of human modification, intervention or manipulation, visually intact and highly aesthetic natural landscapes.</p> | 3 | <p>Whilst a relatively high measure of coherence applies to the portion of the peninsula that is within the ONL, it is currently impacted by scarring and building on adjacent land as mentioned above. That prominence is likely to diminish as mitigation measures and wider planting initiatives on the subdivision progress further.</p> |
| Experiential Values | | |
| <p>Expressiveness</p> <p>The ‘legibility’ of the landscape. Natural features clearly demonstrate the natural processes that formed them.</p> | 4 | <p>A strong coastal identity and expression of the interaction between – predominantly – hard coast and wave action on this exposed shoreline. Remaining natural vegetation patterns and compositions also contribute.</p> |
| <p>Sensory qualities</p> <p>(These are landscape phenomena as directly perceived and experienced by humans, such as the view of a scenic landscape, or the distinctive smell and sound of the foreshore).</p> | 3 | <p>The sounds of wave action, smell of resulting salty air and general exposure to the elements are present, but not as influential as in some other areas of Northland’s coast.</p> |
| <p>Transient Values</p> <p>The consistent and repeated occurrence of transient features that contributes to the character, qualities and values of the landscape; landscapes are widely recognised for their transient features and the contribution that these make to the landscape.</p> | 3 | <p>Primarily related to sea state and early morning lighting of the landform and seaward contour. Colour changes in pasture are a feature of the wider peninsula in summer months, but those areas are largely outside this ONL.</p> |
| <p>Remoteness / Wildness</p> <p>Does the landscape display a wilderness character, remote from and untouched by human presence? Eg.</p> <ul style="list-style-type: none"> • Sense of remoteness • Accessibility • Distance from built development | 3 | <p>Whilst lightly settled and not readily accessed by the public, the presence of substantial buildings and the prominence of many access corridors brings a moderately developed sense of broad-scale domesticity to the landscape of the outer peninsula.</p> |
| <p>Shared and recognised values</p> <p>Natural features and landscape are widely known and valued by the immediate and wider community for their contribution to a sense of place leading to a strong community association with, or high public esteem for the place.</p> | 4 | <p>A prominent and well know landmark guarding the northern edge of the Bay of Islands. The Ninepins area is a very popular boating destination and the turning point for vessels entering or leaving this side of the wider embayment.</p> |
| <p>Spiritual, cultural and historical associations</p> <p>Natural features and landscapes can be clearly and</p> | | |

| | | |
|---|-------------|---|
| <p>widely known and influenced by their connection to the spiritual, cultural and historical valued in the place and includes associative meanings and associative activities valued by the community. Associative meanings are spiritual, cultural or social associations with particular landscape elements, features, or areas, whilst associative activities are patterns of social activity that occur in particular parts of a landscape, for example, popular walking routes or fishing spots.</p> | <p>****</p> | <p>Consultation was initiated during the mapping process, but has not led to any feedback within the required period.</p> <p>Role of Mataka and Purerua as a local landmark and orientation point is likely to give this area some prominence in local minds.</p> <p>Presence of the Marsden Cross memorial and related reserve area.</p> |
|---|-------------|---|

Rank scale between 1 (low) and 5 (high)

| Land Types |
|--------------------------------------|
| Coastal cliffs / escarpment |
| Low escarpment |
| Bays and headlands |
| Beach |
| Dune complex |
| Reefs and islands |
| Estuarine / inlet |
| Open harbour |
| Coastal plain |
| Rolling hills |
| Steep hills; moderate to high relief |
| Ranges; high relief |
| Strongly rolling land |
| Low rolling land |
| Valley floors and flats |
| Plains |
| Volcanic cones |
| River mouth |
| Wetland |
| Watercourses |
| Lakes and water bodies |

Photographs of unit





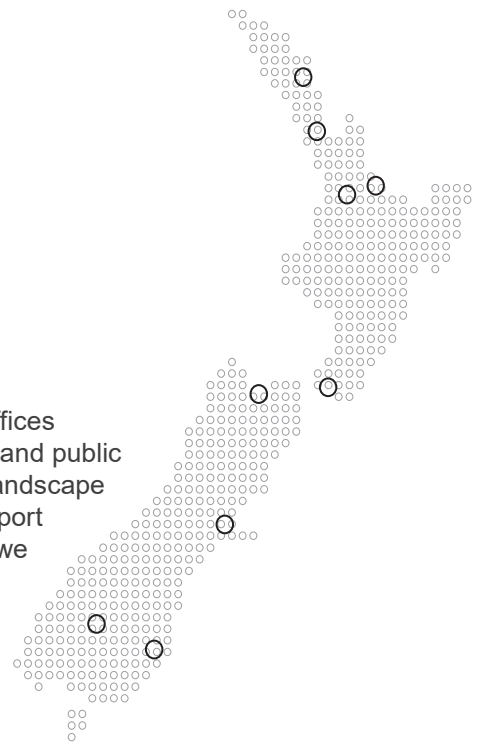






Together. Shaping Better Places.

Boffa Miskell is a leading New Zealand environmental consultancy with nine offices throughout Aotearoa. We work with a wide range of local, international private and public sector clients in the areas of planning, urban design, landscape architecture, landscape planning, ecology, biosecurity, Te Hīhiri (cultural advisory), engagement, transport advisory, climate change, graphics, and mapping. Over the past five decades we have built a reputation for creativity, professionalism, innovation, and excellence by understanding each project's interconnections with the wider environmental, social, cultural, and economic context.



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| | | | | | | | | |
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MATAKA LOT 4

LANDSCAPE AND VISUAL ASSESSMENT GRAPHIC SUPPLEMENT

JANUARY 2025



Mataka Lot 4



MAPS

FIGURE 1: Location of Visual Simulations

VISUAL SIMULATIONS

- VS 1A: View from 850m offshore - Existing and Proposed View without Mitigation
- VS 1B: View from 850m offshore - Proposed View without Mitigation and Proposed View with Mitigation

- VS 2A: View from 425m offshore - Existing and Proposed View without Mitigation
- VS 2B: View from 425m offshore - Proposed View without Mitigation and Proposed View with Mitigation

- VS 3: View from Adjacent Beach looking Northwest - Existing and Proposed View





Existing View



Proposed View without Mitigation



Proposed View without Mitigation



Proposed View with Mitigation



Existing View



Proposed View without Mitigation



Proposed View without Mitigation



Proposed View with Mitigation



Existing View



Proposed View

**ARCHAEOLOGICAL SURVEY OF PORTION OF
LOT 4 DP 323083,
MATAKA STATION, BAY OF ISLANDS**

PREPARED FOR CHESHIRE ARCHITECTS



**JUSTIN MAXWELL AND JENNIFER HUEBERT
SUNRISE ARCHAEOLOGY REPORT NO. 2024-32**



NOVEMBER 2024

Sunrise Archaeology

Justin Maxwell & Jennifer Huebert

Phone: 021 088 31418

Email: jj@sunarc.co.nz

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1 Introduction

The landowner is proposing to build dwellings on Lot 4 DP 323083, an ~57-ha parcel of land at Mataka Station in the Bay of Islands, Northland (Figure 1, Figure 2). Sunrise Archaeology was commissioned by Cheshire Architects to undertake an archaeological survey of the northeastern extent of this property where the owner wishes to build and undertake landscaping. This document assesses the area where work is proposed. See Appendix A for the building and landscaping plans.

The plans specifically include construction of a larger and a smaller dwelling, emplacement of water and septic tanks, concrete and stone walls and terracing, gravelled courtyard and parking areas, and an informal track to the beach (Figure 3). Landscaping includes native plantings to the west and south, and extension of some existing vegetation formations with new plantings and some larger trees.

The client requested that Sunrise Archaeology investigate this location for archaeological features. The areas where groundworks may be required, and the proposed access routes, were surveyed. A foot survey was undertaken by Justin Maxwell on 4 November 2023. This report outlines the results.

This work was undertaken to record archaeological sites or remains in areas which may be affected by the associated earthworks, and to advise the architects as to the landowner's obligations under the *Heritage New Zealand Pouhere Taonga Act 2014*, in respect of any affected archaeological sites.



Figure 1. Project location at Mataka Station indicated by red pin. Source: Google Maps, 2024.

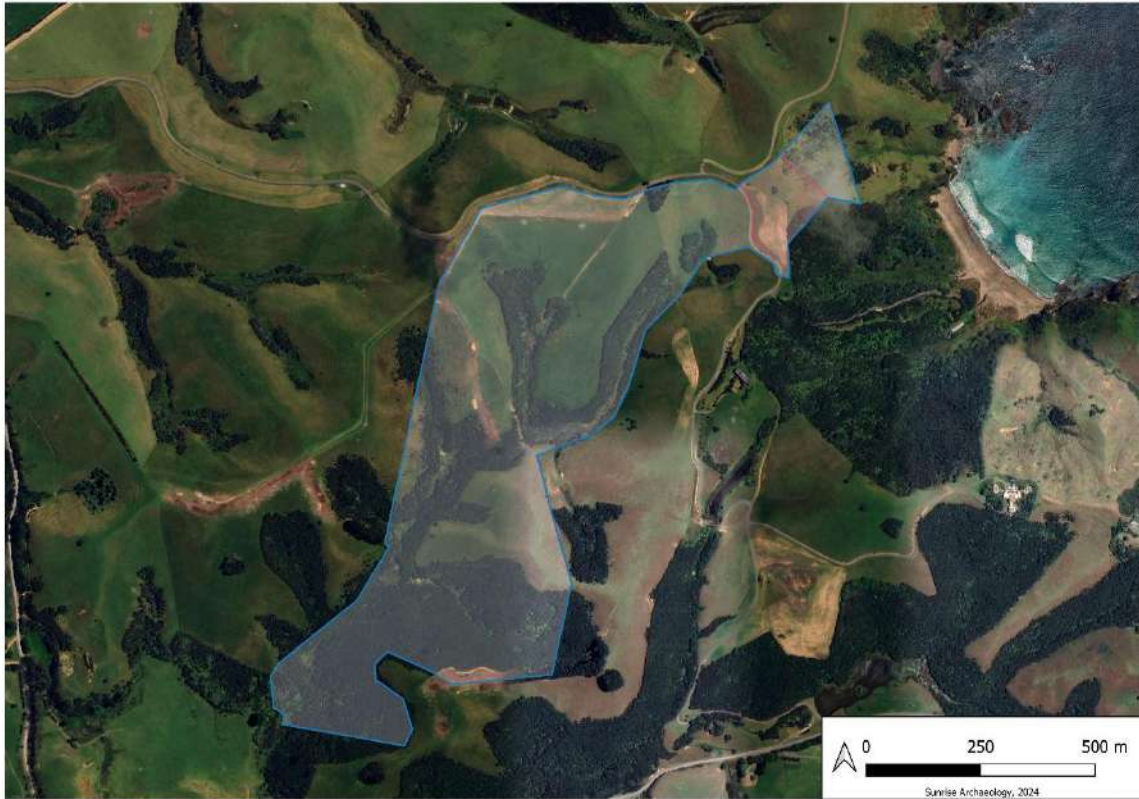


Figure 2. Location of proposed development on Lot 4, indicated by red cross-hatching. Source: QuickMap; base figure Google Earth, 2024.

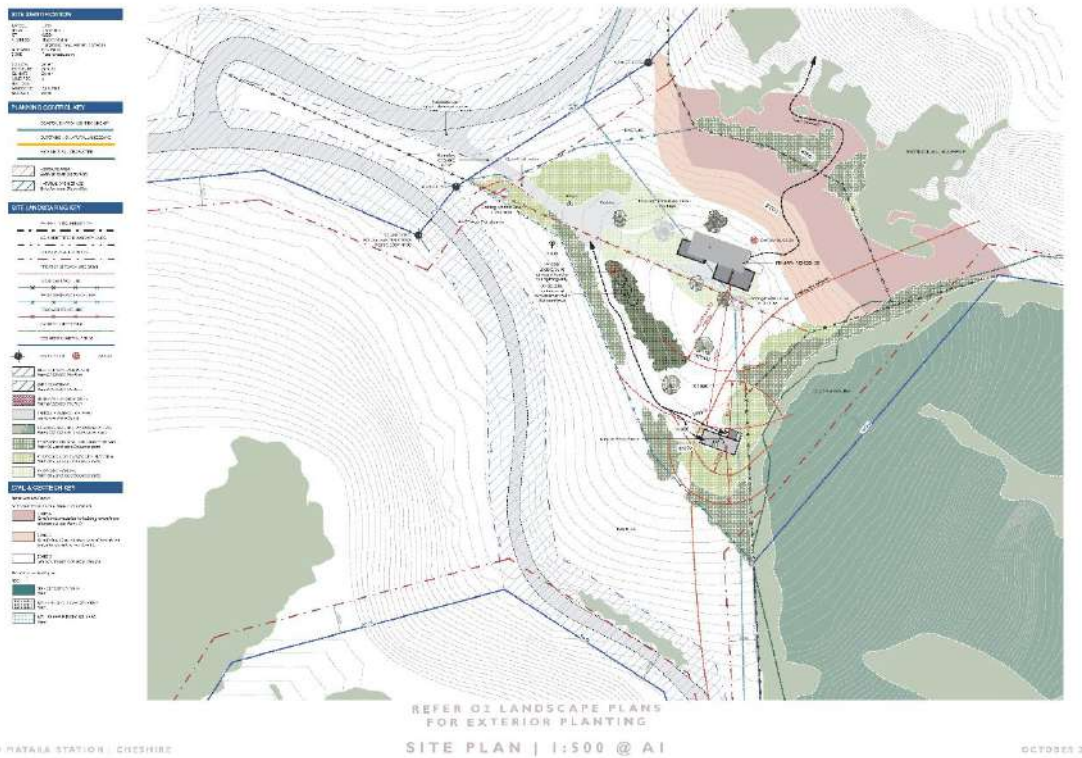


Figure 3. Proposed development plans, dated Oct. 2024. Full landscaping plans appear in Appendix A. Source: Cheshire Architects, 2024.

2 Statutory Requirements

There are two main pieces of legislation in New Zealand that control work affecting archaeological sites. These are the *Heritage New Zealand Pouhere Taonga Act, 2014* (HNZPTA), and the *Resource Management Act, 1991* (RMA).

Heritage New Zealand Pouhere Taonga Act 2014 - Archaeological Provisions

Heritage New Zealand Pouhere Taonga (HNZPT) administers the *Heritage New Zealand Pouhere Taonga Act* (HNZPTA). All archaeological sites in New Zealand are protected under this act and may only be modified with the written authority of the HNZPT. The act contains a consent (commonly referred to as an “Authority”) process for work of any nature affecting archaeological sites, which are defined as:

Any place in New Zealand, including any building or structure (or part of a building or structure), that:

(i) Was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and

(ii) Provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and

(b) Includes a site for which a declaration is made under section 43(1)

Any person who intends carrying out work that may damage, modify, or destroy an archaeological site must first obtain an authority from the HNZPT (Part 3 Section 44). The process applies to archaeological sites on all land in New Zealand irrespective of the type of tenure. The maximum penalty in the HNZPTA for un-authorised damage of an archaeological site is \$120,000. The maximum penalty for un-authorised site destruction is \$300,000.

The archaeological authority process applies to all sites that fit the Heritage New Zealand definition, regardless of whether:

- The site is recorded in the New Zealand Archaeological Association (NZAA) Site Recording Scheme or registered/declared by the Heritage New Zealand Pouhere Taonga,
- The site only becomes known about as a result of ground disturbance and /or,
- The activity is permitted under a district or regional plan, or resource or building consent has been granted.

HNZPT also maintains a Register of Historic Places, Historic Areas, Wahi Tapu and Wahi Tapu Areas. The register can include some archaeological sites (though the main database for archaeological sites is maintained independently by the NZAA). The purpose of the register is to inform members of the public about such places and to assist with their protection under the *Resource Management Act, 1991*.

The Resource Management Act 1991 - Archaeological Provisions

The RMA requires City, District and Regional Councils to manage the use, development, and protection of natural and physical resources in a way that provided for the well-being of

today's communities while safeguarding the options for future generations. The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (section 6f).

Historic Heritage is defined as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities.

Historic heritage includes:

- historic sites, structures, places, and areas;
- archaeological sites;
- sites of significance to Māori, including wāhi tapu;
- surroundings associated with the natural and physical resources (RMA section 2).

These categories are not mutually exclusive, and some archaeological sites may include above ground structures or may also be places that are of significance to Māori.

Where resource consent is required for any activity, the assessment of effects is required to address cultural and historic heritage matters (RMA 4th Schedule and the District Plan assessment criteria (if appropriate)).

3 Methodology

Sunrise Archaeology consulted the New Zealand Archaeological Association (NZAA) site recording scheme ArchSite (www.archsite.org.nz) to determine whether any previously known sites were present on or near the property.

Prior to the site visit, aerial photos and cartographic records were researched to indicate potential areas of interest. Older survey plans of the area were also examined for information relating to early structures and infrastructure in the area.

A surface survey, shovel tests, and probing was conducted. The location of any archaeological features, if noted, were recorded with a GPS unit (Garmin 64st). See Site Visit section for details of the survey.

This survey was conducted to locate and record archaeological remains. The survey and report do not aim to locate or identify wāhi tapu or other places of cultural or spiritual significance to Māori. Those assessments are to be made by Tangata Whenua, who may be approached independently for any information or concerns they may have.

4 Physical Setting

The property is on the western side of Mataka Station, which covers a large portion of the Purerua Peninsula in the Bay of Islands. Wiwiki Beach is to the east, and several km to the south is Marsden Cross and the Rangihoua Pā and Heritage Park. The highest point in this area is Mount Pocock (Mataka). Access is via a secondary road that branches east off Rangihoua Road.

The subject property is presently a mosaic of pastured, rolling hills, scrub and invasive plants and regenerating bush. It is bordered by large lifestyle properties with similar vegetation cover. To the east, across a narrow portion of the neighbouring property, there is a small arc of sandy beach and the ocean.

The site of the proposed development is on the brow of a ridge overlooking the ocean. It is in pasture, with several mature Norfolk Pines, a grove of Pohutukawa to the northwest, and regenerating bush to the east and north.

The soils of this area are mature greywacke, Rangiora clay, clay loam and silty clay loam (RAH). These soils are typical of rolling hill country in Northland, with a hard basement rock and compacted sand- and siltstone. They tend to be acidic, can be prone to pugging, and large-scale slips (Northland Regional Council, 2024).

5 Previous Archaeology

This portion of the Purerua Peninsula has been previously systematically surveyed for archaeological sites, and many sites have been recorded on the peninsula. The largest survey was by Leahy and Walsh (1977/78), who noted that sites here tended to be small, and included terraced headlands and ridges. During this survey they also recorded a number of pā, with terraces and scarps, and noted that pā on the peninsula were not clustered in one area.

The subject property has one previously recorded archaeological site, a midden some distance from the proposed development (Figure 4, Table 1). Four sites are to the northeast of the proposed house site, between it and the coastline.

A review of historical aerial photographs from the mid-twentieth century (Figure 5) shows nothing of archaeological interest in this area.

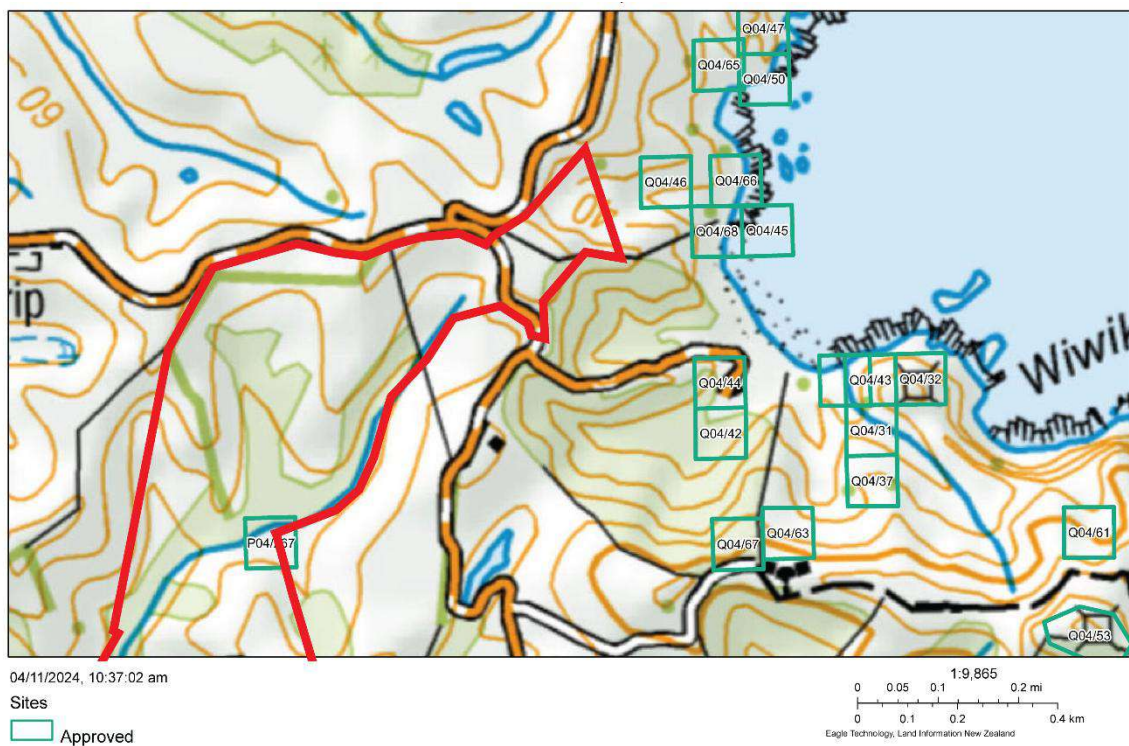


Figure 4. Recorded archaeological sites on property (red outline) and in surrounding area. Base figure: NZTopo50, LINZ.

Table 1. Recorded archaeological sites on or in the vicinity of the project area. Starred sites on the subject property. Source: NZAA Archsite, 2022.

| NZAA Site Number | Site Type | Year Recorded, Revisited | Description |
|-------------------------|--------------------------------|---------------------------------|--|
| Po4/267 | Midden | 1978 | Midden, mostly cockle |
| Qo4/45 | Midden | 1978 | Midden, mostly cockle, sometimes dense; at base of spur in sandy bank at beach |
| Qo4/46 | Terraces and possible palisade | 1978 | Y-shaped ridge with terraces and possible defensive feature |
| Qo4/66 | Midden and oven | 1987, 2003 | Small oven and a shell midden, near small stream at N end beach |
| Qo4/68 | Burial | 1987 | Cranium exposed. Area covered in rocks. Human remains reported to have been found in area. |

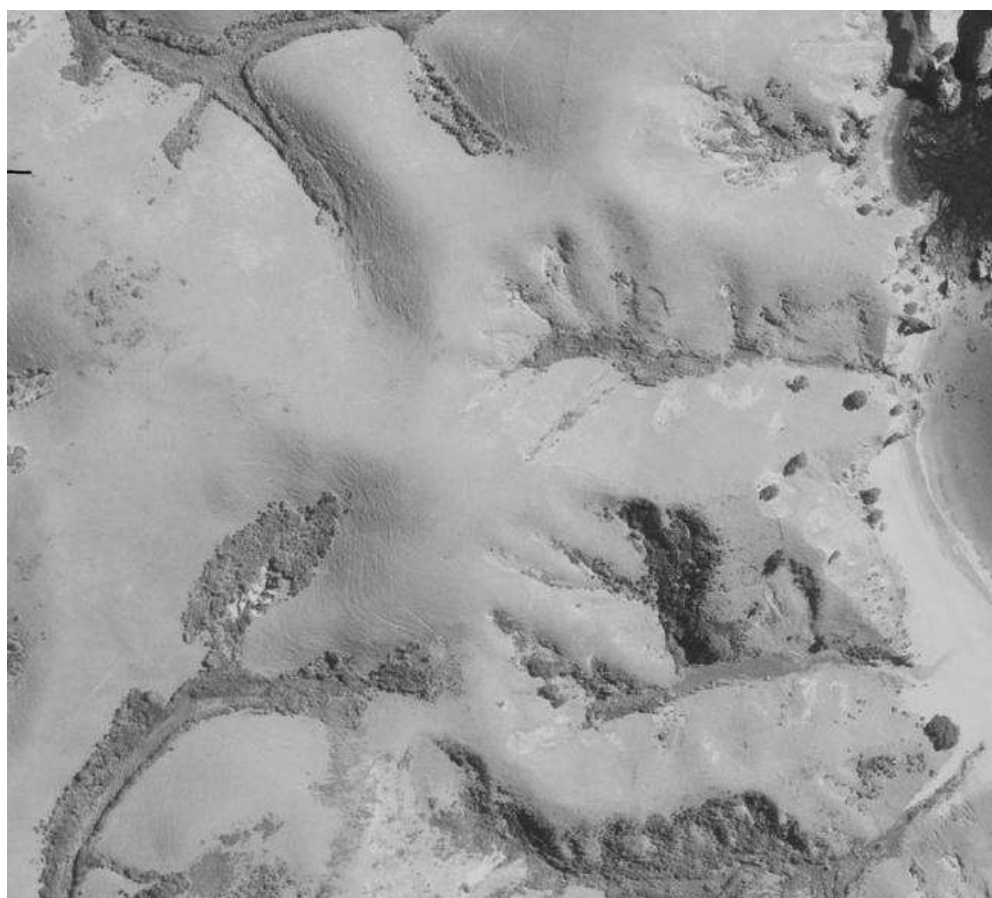


Figure 5. Aerial photograph of project area and surrounding countryside in 1951. Source: Aerial image #350/1366/84 (retrolens.nz).

6 Site Visit

The author visited the project area 4 November 2024. Visibility of the ground surface was excellent within the area proposed for dwellings and associated infrastructure, as it was grazed. To the north of the house site, on steeper ground in areas identified for vegetation regeneration, tall (up to 1 m high) kikuyu grass, scrub, and regenerating bush was present, which made surveying this area largely pointless.

No above-ground features were noted within the areas where ground disturbance is required for the buildings or associated infrastructure. Twelve shovel tests were excavated. All were sterile, and encountered a 10-20 cm thin topsoil overlaying clay. It is possible that this entire area has been modified in the past. Probing was conducted across the grazed portion of the project area, and no indications of subsurface material was identified.

Efforts were made to relocate Site Q04/46, 45, and 68. Site Q05/46 is below and to the east of the proposed building platform; if the recorded site location is correct, it is approximately 190 m away. The site could not be relocated, but given the ground cover in this area this was not surprising. Neither Site Q04/45 or Q04/68 could be relocated. The areas were accessed from the beach, and the site descriptions suggest that the recorded coordinates are incorrect. Site Q04/45 is, based on the site description, in an area which is currently inaccessible due to the scrub and ground cover in the described location. Presumably Site Q04/68 is under the currently pro-grading foredune. Based on the site descriptions, all of these sites are 190 m or more away from the area where the house and associated infrastructure is proposed.

Site P04/267 is on the property, but it is 900 m from the proposed works and will not be affected. Given that it is so far distant from the development, no attempt was made to relocate it.



Figure 6. Proposed building platform, red oval. Facing southeast.



Figure 7. Proposed building platform from above. Top of page northeast.



Figure 8. Main building platform. Facing east. Scale units: 20 cm.



Figure 9. Main building platform. Facing south. Scale units: 20 cm.



Figure 10. Secondary building platform. Facing north. Scale units: 20 cm.



Figure 11. Scrub and gorse below (east) of building platform.



Figure 12. Looking toward proposed building platform from beach. Facing north.

7 Recommendations and Conclusion

Sunrise Archaeology was commissioned by Cheshire Architects to provide an archaeological survey of a portion of Lot 4 DP 323083, Mataka Station, Bay of Islands, where developments are planned. A file search and foot survey were conducted. The survey was limited to the portion of the property planned for development (see Figure 2).

It was found that no sites are located within the proposed development area, and subsurface testing did not identify any subsurface archaeological material.

Based on the results of this survey, Sunrise Archaeology would recommend that an Authority to modify or destroy an archaeological site is not required from Heritage New Zealand Pouhere Taonga, but an Accidental Discovery Protocol (ADP) should be put in place.

Care should be taken on the currently overgrown part of the property, to the east of the proposed building platform. The primary works proposed there are landscaping, and because the area could not be surveyed and archaeological sites are present to the north and east (closer to the coastline), there remains a low likelihood of encountering archaeological features in this area. Given that only landscaping is to occur in this area, if any features are encountered they can be avoided.

Any alterations to the proposed development needs to be reviewed for comment and/or assessment by an archaeologist.

The survey of the property was conducted specifically to locate and record archaeological remains. The survey and report does not necessarily include the location and/or assessment of wāhi-tapu or sites of cultural or spiritual significance to the local Māori community, who may be approached independently for any information or concerns they may have.



NOTICE OF WRITTEN APPROVAL

Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A – To be completed by Applicant

| | |
|---|---|
| Applicant/s Name: | Michael Gilson and Joan McPhee |
| Address of proposed activity: | Lot 4, Mataka Station, Rangihoua Road, Kerikeri, Far North |
| Legal description: | DP323083 CT 92524 |
| Description of the proposal (including why you need resource consent): | Discretionary activities: Residential Intensity consent is sought for a principal and minor dwelling pursuant to rule 8.6.5.4. Buildings within 20m of the drip line of existing trees on site and adjacent scrub consent is sought pursuant to rule 12.3. |
| Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval): | <ol style="list-style-type: none"> 1. 2025-02-10 Mataka Lot 4 RC Arch submission 2. 2025-01-23 Mataka Lot 4 - RC Design Statement + Materials 3. 23-03BA-B Gilson Engineering 4. Appendix B - lot 4 Graphic Supplement 20250120 5. BM12256C Lot 4 Mataka Station LEA 6. Mataka Station RC Landscape Design Dec 2024 7. Mataka Station Lot 4 Assessment 6Nov2024 8. FNDC Earthworks Permit |

9. "cabin" supplemental renders - enhanced screening

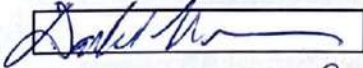
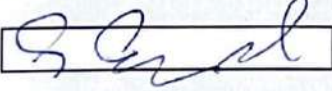
Notes to Applicant:

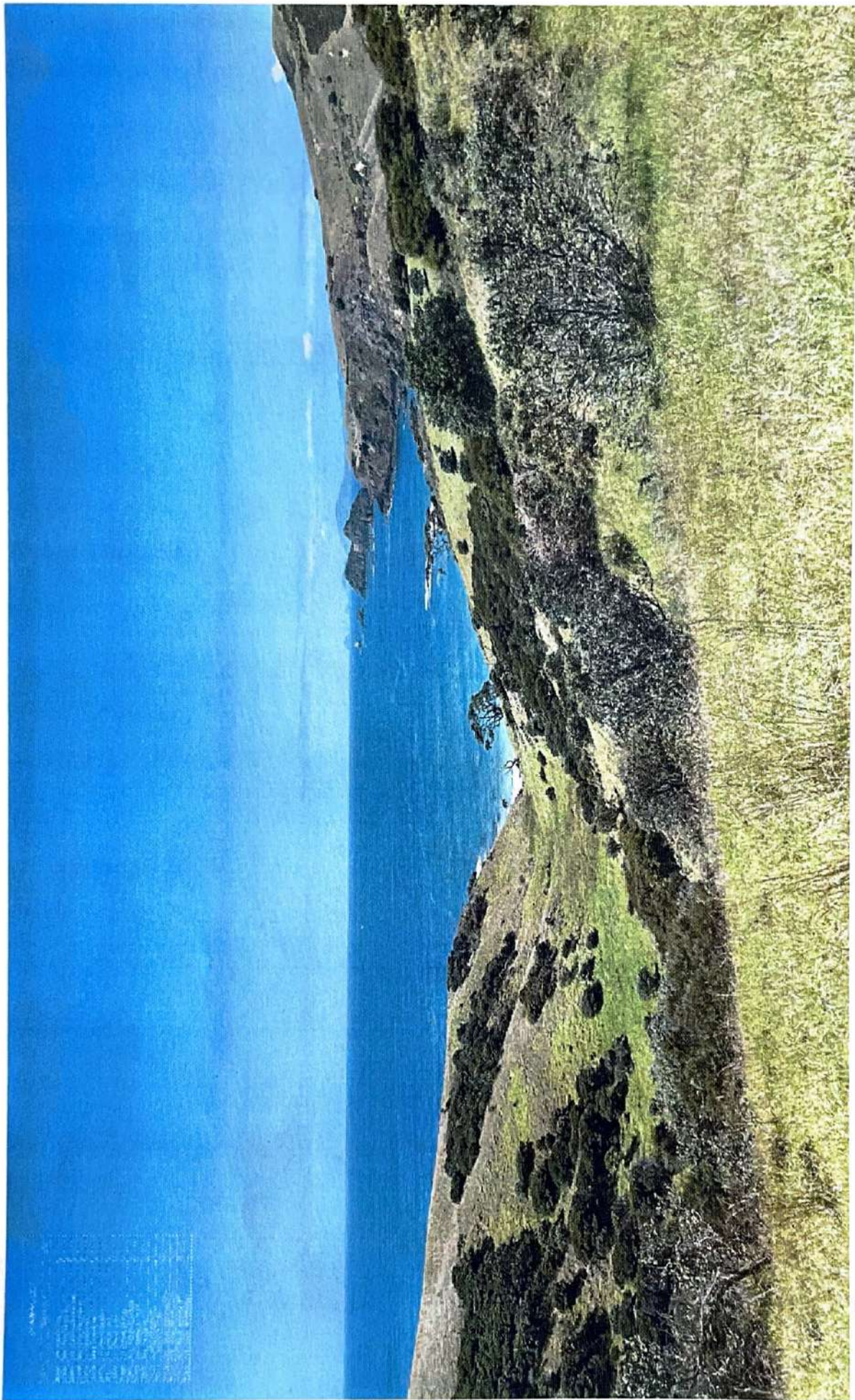
1. Written approval must be obtained from all registered owners and occupiers.
2. The **original copy** of this signed form and **signed plans and accompanying documents** must be supplied to the Far North District Council.
3. The amount and type of information provided to the party from whom you seek written approval should be sufficient to give them a full understanding of your proposal, its effects and why resource consent is needed.

PART B – To be completed by Parties giving approval

Notes to the party giving written approval:

1. If the owner and the occupier of your property are different people then separate written approvals are required from each.
2. You should only sign in the place provided on this form and accompanying plans and documents if you **fully understand** the proposal and if you **support** or have **no opposition** to the proposal. Council will not accept conditional approvals. If you have conditions on your approval, these should be discussed and resolved with the applicant directly.
3. Please note that when you give your written approval to an application, council cannot take into consideration any actual or potential effects of the proposed activity on you unless you formally withdraw your written approval **before** a decision has been made as to whether the application is to be notified or not. After that time you can no longer withdraw your written approval.
4. Please sign and date all associated plans and documentation as referenced overleaf and return with this form.
5. If you have any concerns about giving your written approval or need help understanding this process, please feel free to contact the duty planner on 0800 920 029 or (09) 401 5200.

| | | |
|---|---|---|
| Full name/s of party giving approval: | Donald Chandler and Eloise Caswell | |
| Address of affected property including legal description | 385 Rangihoua Rd Te Tii 0294 Lot 5 DP 323083 | |
| Contact Phone Number/s and email address | Daytime: 02102327293 | email: donald.chandler@gmail.com |
| I am/we are the OWNER(S) / OCCUPIER(S) of the property (circle which is applicable) | | |
| <i>Please note: in most instances the approval of all the legal owners and the occupiers of the affected property will be necessary.</i> | | |
| <ol style="list-style-type: none"> 1. I/We have been provided with the details concerning the application submitted to Council and understand the proposal and aspects of non-compliance with the Operative District Plan. 2. I/We have signed each page of the plans and documentation in respect of this proposal (these need to accompany this form). 3. I/We understand and accept that once I/we give my/our approval the Consent Authority (Council) cannot take account of any actual or potential effect of the activity and/or proposal upon me/us when considering the application and the fact that any such effect may occur shall not be relevant grounds upon which the Consent Authority may refuse to grant the application. 4. I/We understand that at any time before the notification decision is made on the application, I/we may give notice in writing to Council that this approval is withdrawn. | | |
| Signature |  | Date <input type="text" value="23 Feb 2025"/> |
| Signature |  | Date <input type="text" value="23 Feb 2025"/> |
| Signature | <input type="text"/> | Date <input type="text"/> |
| Signature | <input type="text"/> | Date <input type="text"/> |



1 David M W - E. B. Bull
23 Feb 2025

MATAKA STATION

2023/26

Lot 4 Mataka Station
DP 3220043
Rangihoua Road, Kōhikeri 0294

CHESHIRE
Cheshire Architects Limited, Level 11, Hudson Towers West, 26-28 Victoria Street, Auckland, New Zealand, PO Box 48522, B952
PH: +61 9 359 2770, FX: +61 9 354 2771, EM: www.cheshirearchitects.com, WB: www.cheshirearchitects.com

98012208 - MATAKA STATION



MATAKA STATION

CHESHIRE ARCHITECTS

22.04.2025

RESOURCE CONSENT : DEVELOPED DESIGN PACKAGE

LOT 4 - MATAKA STATION, BAY OF ISLANDS

Prepared for Michael Gilson & Joar McPhoe

2 David 1th S Bull

23 Feb 2025



GEOTECHNICAL REPORT

FOR
PROPOSED PRIMARY AND MINOR RESIDENCE

AT

LOT 4 MATAKA STATION

**PURERUA PENINSULA
NORTHLAND**

For

MICHAEL GILSON & JOAN MCPHEE

Job No: 23-038A
Date: 19/12/2024

Level 1 ANZ Bank Building 90 Kerikeri Road, Kerikeri, New Zealand
Telephone: 09 407 3255 Email: teampk@pkengin.co.nz

3 David W. S. [Signature]

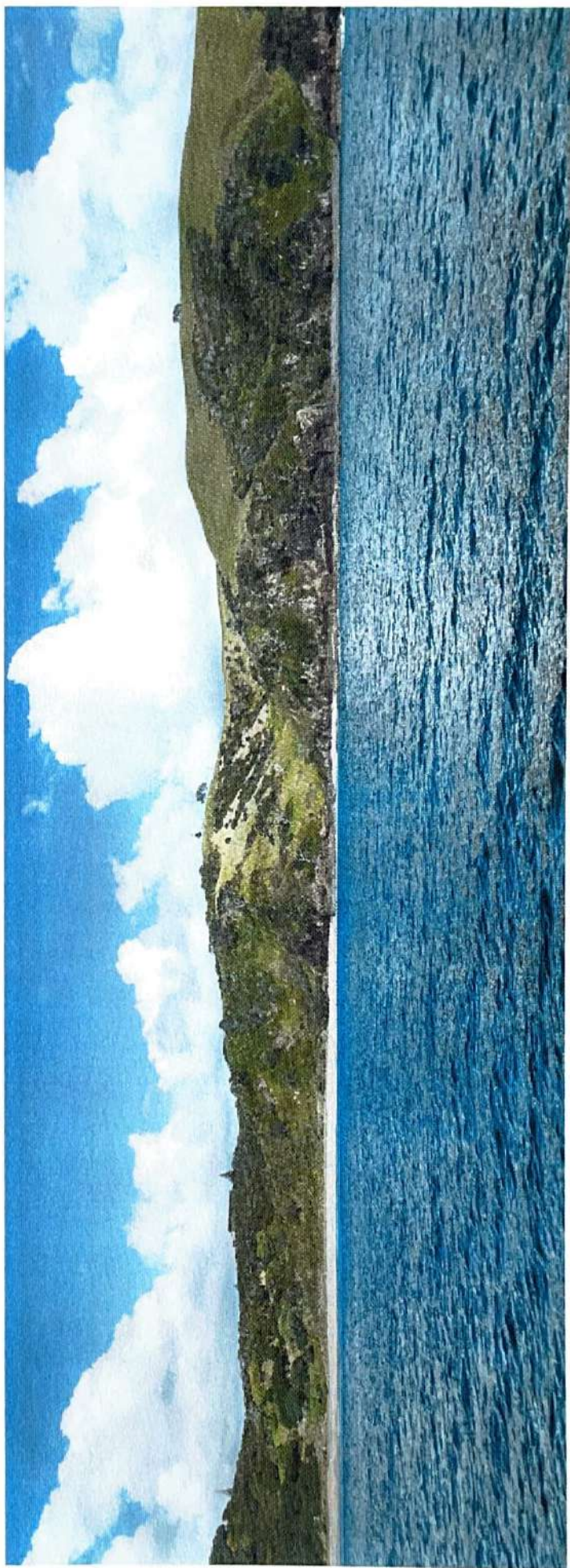
23 Feb 2025

MATAKA LOT 4

LANDSCAPE AND VISUAL ASSESSMENT
GRAPHIC SUPPLEMENT

4 South M... 23 Feb 2025

JANUARY 2025



Boffa Miskell



Lot 4 Proposed Dwelling, Mataka Station

Landscape Effects Assessment
Prepared for Michael Gibson and Joan McPhee

20 January 2025

S. Latham

23 Feb 2025



6. David A. McPhee
A. McPhee

23 Feb 2025

Gilson McPhee

Resource Consent Landscape Design

December 2024

o2landscapes.com



**ARCHAEOLOGICAL SURVEY OF PORTION OF
LOT 4 DP 323083,
MATAKA STATION, BAY OF ISLANDS**

PREPARED FOR CHESHIRE ARCHITECTS



**JUSTIN MAXWELL AND JENNIFER HUEBERT
SUNRISE ARCHAEOLOGY REPORT NO. 2024-32**



NOVEMBER 2024

J. Maxwell

23 Feb 2025



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

HE ARA TĀMATA
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Private Bag 752, Kaikohe 0440, New Zealand

ask.us@fnkc.govt.nz

0800 920 029

fnkc.govt.nz

Our Reference: 3000042-LGAEWK

20 December 2024

Michael Frederick Gilson
333 Central Park W 74
New York 10025-7105
UNITED STATES

8A *Dunlop*
E. Gull
23 Feb 2025

Dear Sir / Madam

RE: Earthworks Permit, Lot 4, Rangihoua Road, Kerikeri 0294

Attached is a copy of the earthworks permit for the above-mentioned property. Please note that there are site specific conditions listed on schedule B (the Permit).

Additionally, all earthworks are subject to the following standard conditions:

1. The permit holder is to establish and mark the location of boundary pegs and mark all property boundaries adjacent to the proposed earthworks. No authorisation is given for works on private property other than the lot subject to the Earthworks Permit. Where the permit holder is not the lot owner, the permit holder is responsible for obtaining approval from the lot owner prior to commencing work.
2. The permit holder is to ensure that stormwater diversion and silt control measures are in place prior to the commencement of bulk earthworks.
3. The permit holder is responsible for the repair and reinstatement of any underground services damaged as a result of the earthworks.
4. The permit holder is responsible for the repair and reinstatement of the road carriageway, the kerb and footpath damaged as a result of the earthworks. Such works where required will be completed to the satisfaction of the Council's Roading Manager.
5. Any debris deposited on the public road as a result of the earthworks shall be removed by or at the expense of the permit holder.
6. Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority obtained from Heritage New Zealand Pouhere Taonga. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately. The New Zealand Police should also be consulted if the discovery includes koiwi (human remains). A copy of the Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol is attached for your information. This should be made available to all person(s) working on site.

Yours faithfully

Azalea Warren
Resource Consents Engineer
District Services

88 Donaldson & Co

23 Feb 2025

Disturbance Table

| Disturbance Type | Area (m ²) | Volume (m ³) |
|------------------|------------------------|--------------------------|
| Excavation | 100 | 100 |
| Grading | 100 | 100 |
| Clearing | 100 | 100 |
| Planting | 100 | 100 |
| Other | 100 | 100 |

Earthworks Area = 870m²
 FFL = RL 100.8
 Cut = RL 100.3

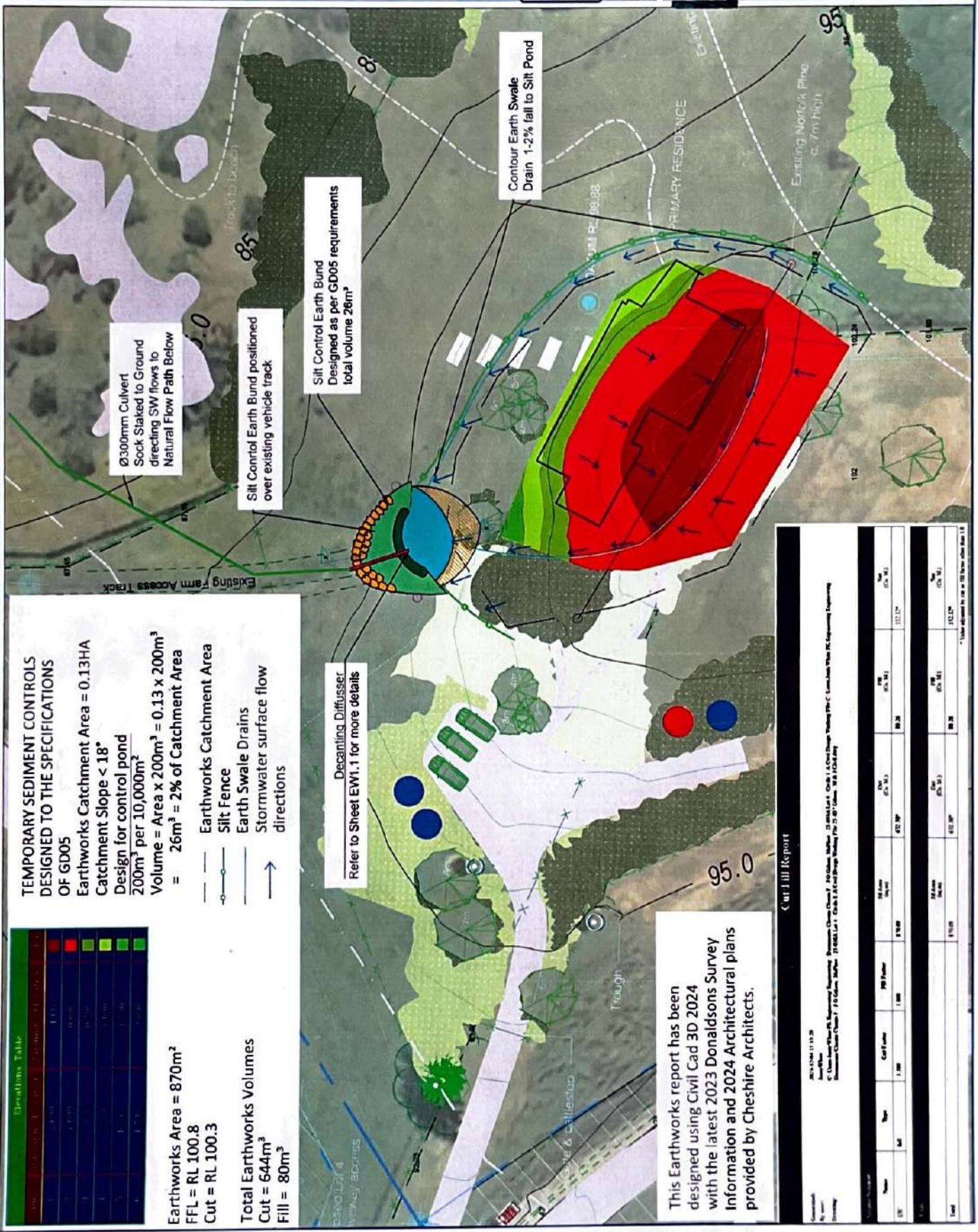
Total Earthworks Volumes
 Cut = 644m³
 Fill = 80m³

TEMPORARY SEDIMENT CONTROLS DESIGNED TO THE SPECIFICATIONS OF GD05

Earthworks Catchment Area = 0.13HA
 Catchment Slope < 18°
 Design for control pond
 200m³ per 10,000m²
 Volume = Area x 200m³ = 0.13 x 200m³
 = 26m³ = 2% of Catchment Area

- Earthworks Catchment Area
- Silt Fence
- Earth Swale Drains
- Stormwater surface flow directions

Refer to Sheet EWI.1 for more details



Notes:

- THE COMPENSATION OF THE DRAWING IS RESTRICTED TO THE WORK SHOWN AND DOES NOT INCLUDE THE MANUFACTURE OF ANY APPLIANCE WITHOUT THE EXPRESS PERMISSION OF THE COMPANY HOLDERS.
- VERIFY ALL DIMENSIONS AND LEVELS ON SITE BEFORE COMMENCING WORK AND REPORT DISCREPANCIES IMMEDIATELY TO THE ARCHITECT.
- THE DRAWING IS TO BE USED IN CONJUNCTION WITH ALL RELEVANT PROJECTS AND ANY DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT FOR RESOLUTION.
- IN THE EVENT THAT THERE IS ANY CONFLICT BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE SPECIFICATIONS SHALL TAKE PRECEDENCE OVER THE DRAWINGS AND THE GENERAL NOTE.



ISSUED FOR CONSENT

PK ENGINEERING

LEVEL: ANZEBANK
 90 KENNERLY ROAD, KERRERRI
 PO BOX 444, KERRERRI
 Phone Number: 09 407 3255
 Email: info@pkengineering.co.nz

CLIENT: GILSONS, M & J

| | |
|--|--------------|
| LOT 4 MATAKA STATION | |
| PROPOSED DEVELOPMENT CUT/FILL & SILT CONTROL PLAN | |
| SCALE: 1:400 | DWG: 2024 |
| PROJECT NO: 23-038A | PK: A3/EW1.0 |
| | 0 |

This Earthworks report has been designed using Civil 3D 2024 with the latest 2023 Donaldsons Survey Information and 2024 Architectural plans provided by Cheshire Architects.

Cut/Fill Report

| Station | Area (m ²) | Volume (m ³) | Area (m ²) | Volume (m ³) |
|--------------|------------------------|--------------------------|------------------------|--------------------------|
| 0+00 | 100 | 100 | 100 | 100 |
| 0+10 | 100 | 100 | 100 | 100 |
| 0+20 | 100 | 100 | 100 | 100 |
| 0+30 | 100 | 100 | 100 | 100 |
| 0+40 | 100 | 100 | 100 | 100 |
| 0+50 | 100 | 100 | 100 | 100 |
| 0+60 | 100 | 100 | 100 | 100 |
| 0+70 | 100 | 100 | 100 | 100 |
| 0+80 | 100 | 100 | 100 | 100 |
| 0+90 | 100 | 100 | 100 | 100 |
| 1+00 | 100 | 100 | 100 | 100 |
| Total | 1000 | 1000 | 1000 | 1000 |

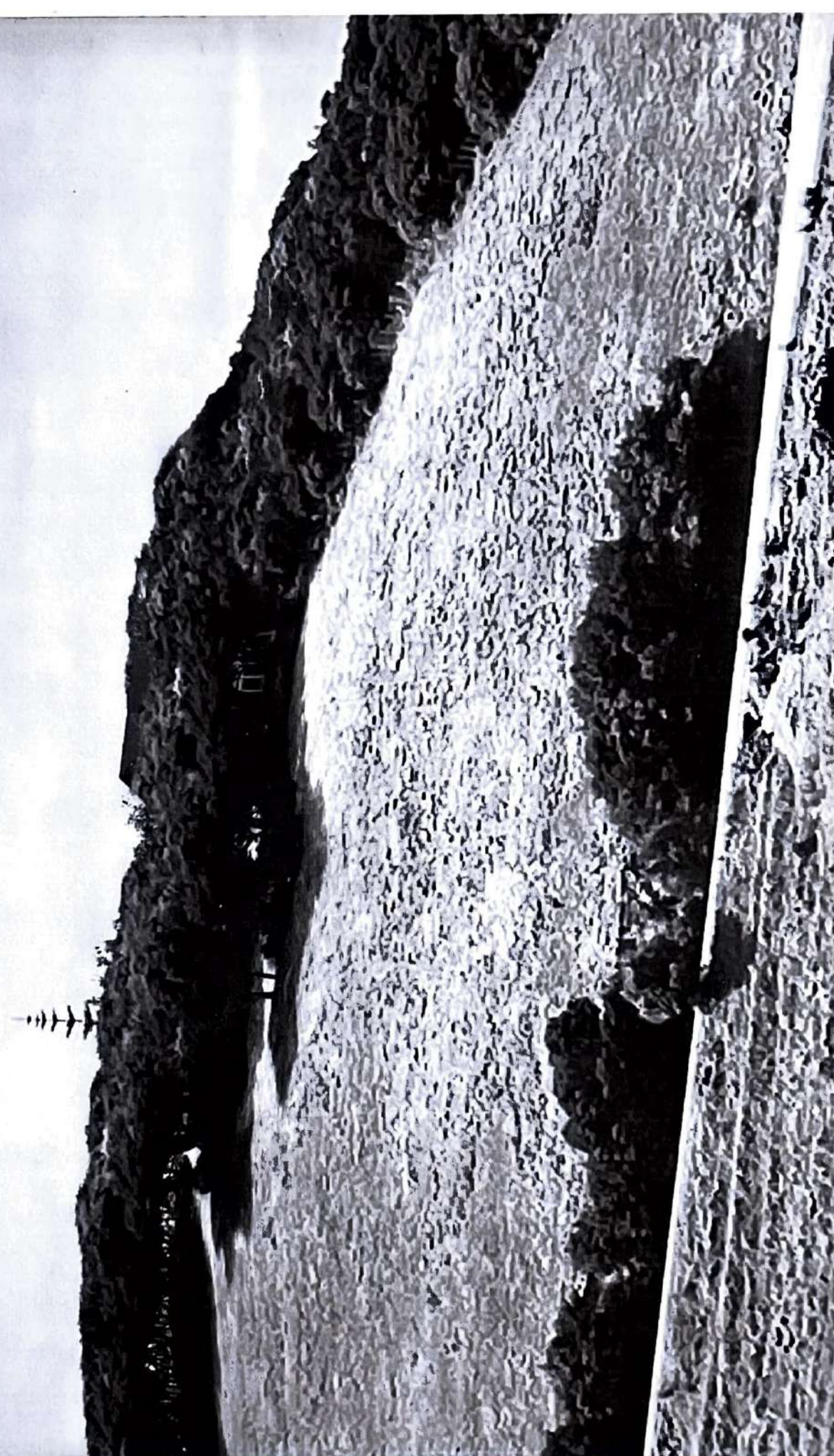
* All volumes are in m³ unless otherwise stated.

9A Seaman
S. Reed

23 Feb 2025



9B Aerial Map
23 Feb 2025



From: [John Goodwin](#)
To: [Sarah Gilbertson](#); [Nat Cheshire](#)
Cc: [David Ponting](#); [Wendy Shacklock](#); [Donald Chandler \(manager@mataka.co.nz\)](#); [evan@williamsgrpnz.com](#)
Subject: RE: Lot 4 Mataka - Design Review Group resubmission
Date: Monday, 2 December 2024 9:01:42 am
Attachments: [image001.png](#)

Hi Sarah and Nat,

The DRC have reviewed the revised design for Lot 4 and consider the scheme addresses the points raised in our formal feedback document. Thank you for taking on board the issues raised and amending the design accordingly.

Kind regards

John

(on behalf of the Mataka Design Review Group)

John Goodwin | Landscape Architect | Consultant | Fellow Registered NZILA Landscape Architect
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From: Sarah Gilbertson <Sarah@cheshirearchitects.com>

Sent: Thursday, 28 November 2024 5:03 pm

To: John Goodwin <John.Goodwin@boffamiskell.co.nz>; Nat Cheshire <Nat@cheshirearchitects.com>

Cc: David Ponting <david@pfa.nz>; Wendy Shacklock <wendy@wendyshacklock.co.nz>; Donald Chandler (manager@mataka.co.nz) <manager@mataka.co.nz>; evan@williamsgrpnz.com

Subject: Lot 4 Mataka - Design Review Group resubmission

Hi John,

Please find attached our response to the points raised by the Design Review Group to our submission for Lot 4 on behalf of our clients Joan and Michael. We have reviewed the design and broadly addressed the commentary. We believe the outcome provides a compliant scheme. Copies of our updated submission for design approval can be found on the link below. Please let us know if you have any difficulty in accessing the files.

 [DRC SUBMISSION_REV2](#)

We look forward to your further feedback, and please don't hesitate to contact us should you require any further information or have any queries.

We would like to thank David, Wendy and yourself for your time and comments, together with Don who has assisted us through the approval process.

Best wishes,

**CHESHIRE
LTD**

ARCHITECTS

*Sarah Gilbertson
Principal*

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