

# 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):*

- |   |   |
|---|---|
| <input type="radio"/> Land Use  | <input type="radio"/> Discharge                           |
| <input type="radio"/> Fast Track Land Use*  | <input type="radio"/> Change of Consent Notice (s.221(3)) |
| <input type="radio"/> Subdivision   | <input type="radio"/> Extension of time (s.125)           |
| <input type="radio"/> Consent under National Environmental Standard<br>(e.g. Assessing and Managing Contaminants in Soil) |   |
| <input type="radio"/> Other (please specify) _____  |   |

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

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

☐ Yes ☐ No

## 4. Consultation

Have you consulted with Iwi/Hapū? ☐ Yes ☐ No

If yes, which groups have you consulted with?

Who else have you consulted with?

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

## 5. Applicant Details

**Name/s:**

Jason Friedlander

**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:**

Bay of Island Planning Ltd

**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:**

Sterling Nominees Limited

**Property Address/  
Location:**

1025 Taupo Bay Rd

**Postcode**



## 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

- |   |   |
|---|---|
| <input type="radio"/> Subdividing land                    | <input type="radio"/> Disturbing, removing or sampling soil       |
| <input type="radio"/> Changing the use of a piece of land | <input type="radio"/> 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) Jason Friedlander

**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)

**Signature:**

(signature of bill payer)

## 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](http://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:**

A large black rectangular box redacting the name and signature information.

### 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.

**BAY OF ISLANDS PLANNING (2022) LIMITED**

**Kerikeri House**

**Suite 3, 88 Kerikeri Road, Kerikeri**

Email – [office@bayplan.co.nz](mailto:office@bayplan.co.nz) Website – [www.bayplan.co.nz](http://www.bayplan.co.nz)

.....

23 April 2025

**Application for Land Use Consent – 1025 Taupo Bay Road, Taupo Bay**

Please find below a resource consent application to undertake additions to an existing dwelling and redevelopment of a garage within the General Coastal Zone of the Operative District Plan [ODP].

Under the Proposed Far North District Plan [PDP] the property is zoned Rural Production with a Coastal Environment overlay and areas of High Natural Character.

The application is supported by the following:

- Appendix A – Title and consent notices
- Appendix B – Architectural Drawings by Stevens Lawson Architects
- Appendix C – Landscape Assessment by Littorals Landscape Architecture
- Appendix D – Landscape Design by O2 Landscapes
- Appendix E – Geotechnical Reports by Cook Costello
- Appendix F – Archaeological Assessment by Geometria

Overall, the application is a **Restricted Discretionary Activity**.

Should you require any further information please do not hesitate to contact me.

Yours sincerely,



Andrew McPhee  
Consultant Planner

## SITE DETAILS

<b>Applicant</b>	Jason Friedlander
<b>Address for Service</b>	Bay of Islands Planning Limited PO Box 318 PAIHIA 0247 C/O – Andrew McPhee <a href="mailto:andrew@bayplan.co.nz">andrew@bayplan.co.nz</a> 021-784-331
<b>Legal Description</b>	Lot 1 DP 567902
<b>Record Of Title [RoT]</b>	1019169
<b>Physical Address</b>	1025 Taupo Bay Road, Taupo Bay
<b>Site Area</b>	8.4275ha
<b>Owner of the Site</b>	Sterling Nominees Limited
<b>District Plan Zone</b>	General Coastal [ODP] Rural Production [PDP]
<b>District Plan Features</b>	NZAA P04/49 Okiore Pā [ODP & PDP] Outstanding Landscape [ODP] Coastal Environment [PDP] HNC 170 [PDP] Coastal Erosion Hazard [PDP]
<b>NRC RPS Overlays</b>	Refer PDP Overlays Above
<b>Soils</b>	Class 6
<b>Flora / Fauna</b>	PNA Taupo Bay Cliffs P0-4006A Kiwi Present
<b>HAIL</b>	Nil
<b>Wetlands</b>	Nil

## Schedule 1

## 1.0 INTRODUCTION & PROPOSAL

### **Report Requirements**

This report has been prepared for Jason Friedlander in support of a land use consent application at 1025 Taupo Bay Road, Taupo Bay.

The application has been prepared in accordance with the provisions of Section 88 and the Fourth Schedule of the Resource Management Act 1991 [RMA]. This report serves as the Assessment of Environmental Effects required under both provisions.

The report also includes an analysis of the relevant provisions of the Far North District Plan [Operative and Proposed], relevant National Policy Statements and Environmental Standards, Regional Planning Documents as well as Part 2 of the RMA.

A range of details regarding the site are outlined in Schedule 1 of this Report. These details are supplemented by the Record of Title and relevant instruments located in **Appendix A**.

Land Use Consent: It is proposed to make alterations and additions to the existing dwelling to include additional bedrooms and a yoga room, as well as redeveloping the garage. The application does not comply with the following land use rules found in the ODP.

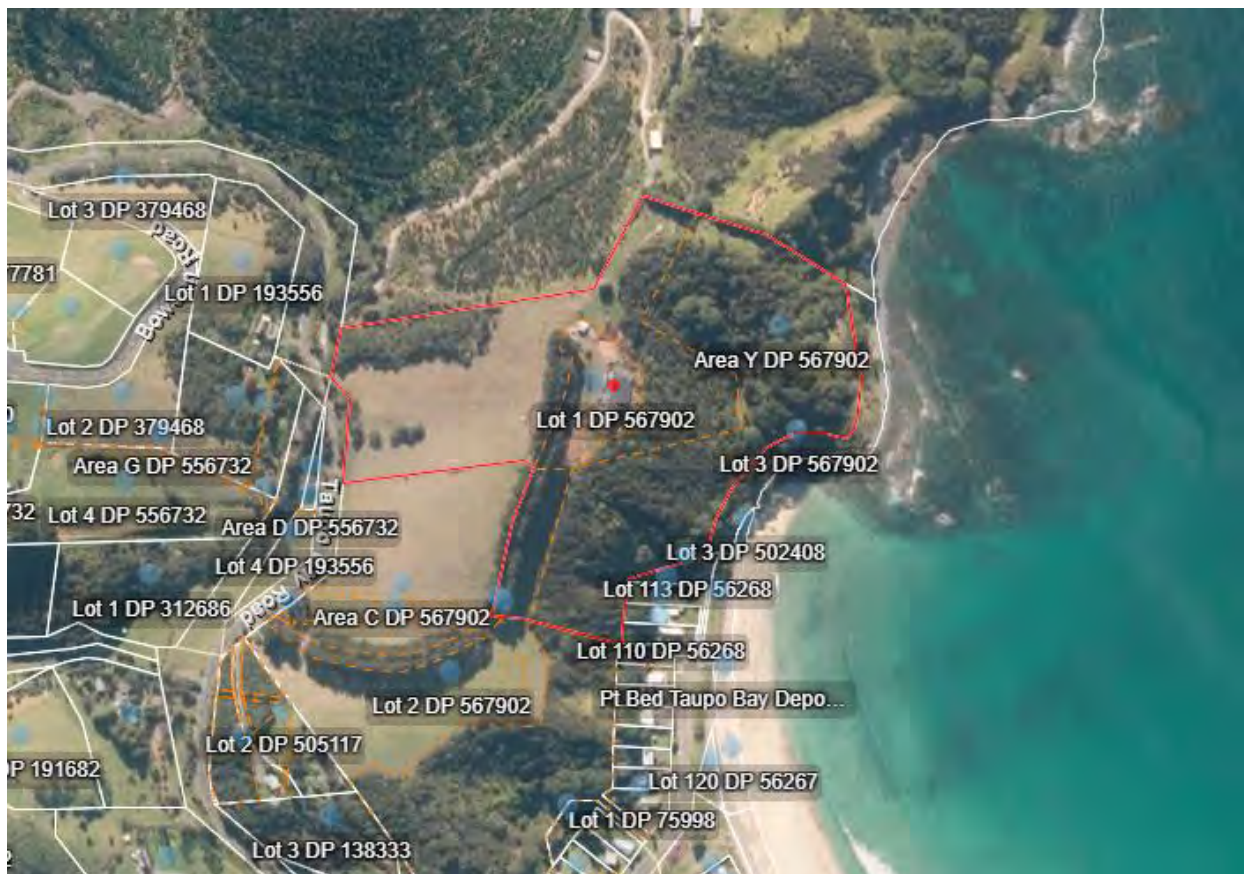
- 10.6.5.1.1 Visual Amenity
- 12.1.6.1.5 Buildings within Outstanding Landscapes

## 2.0 DESCRIPTION OF THE SITE & SURROUNDS

The site is located on the Taupo Bay ridgeline west of Taupo Bay at the northern extent. The site is located within a pocket of General Coastal zoned land with land zoned Coastal Residential to the southeast, and Rural Production to the west on the opposite side of Taupo Bay Road.

From a planning perspective, the following Figures which relate to Schedule 1 provide an understanding of the site.





**Figure 1 – Site Aerial [Source: Prover]**

The property gains access from Taupo Bay Road through the site to the south [Lot 2 DP 567902] through a right of way easement. The site contains areas of indigenous vegetation, bush and archaeological features to the east of the existing dwelling. These areas are protected by way of a consent notice on the property [CN 12358495.3]. Aside from the existing dwelling the site contains a garage and a couple of small sheds.





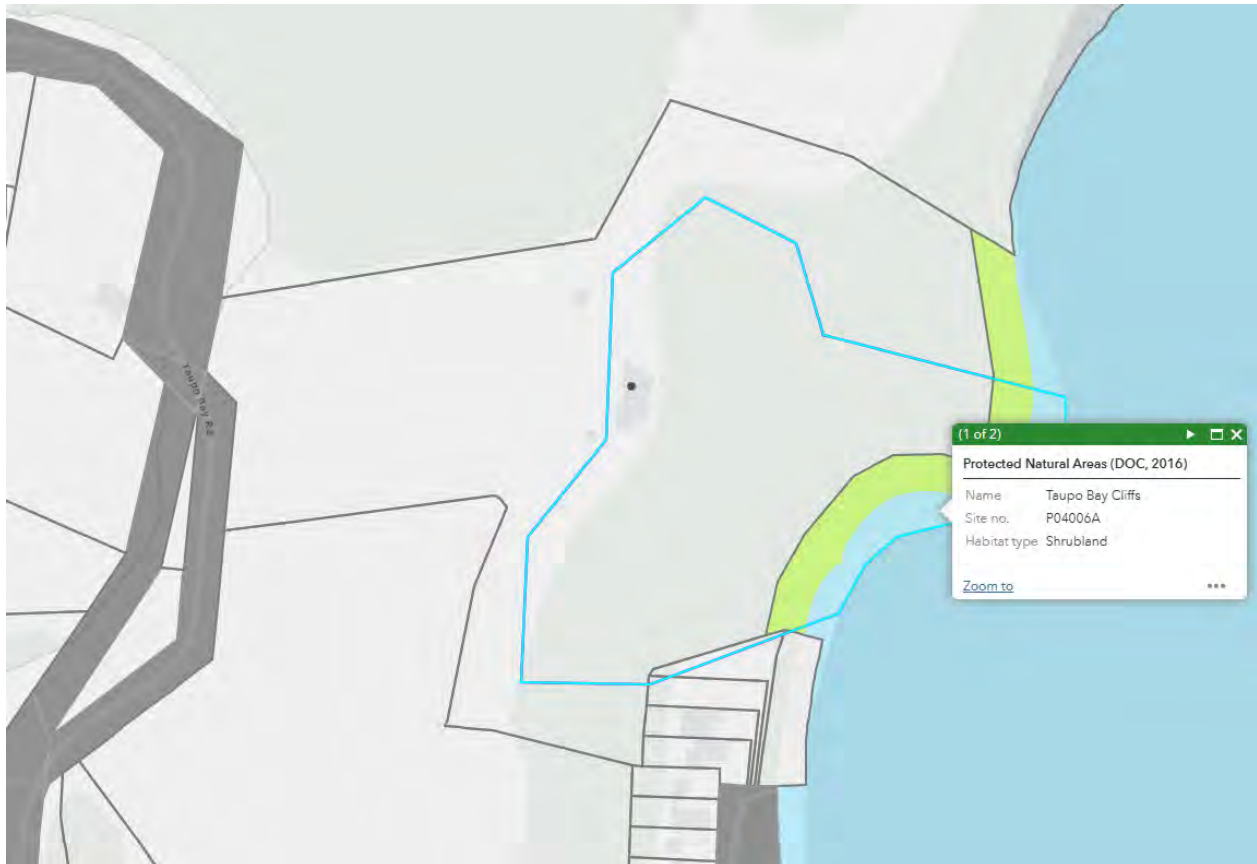
**Figure 2 – Site Topo [Source: Prover]**

The topography of the site is as shown in [Figure 2](#). The location of the dwelling is on the flatter part of the site, which then tapers off to the Taupo Bay coastline.



**Figures 3 and 4 – Zoning & Resources [Source: Far North Maps]**

The site is zoned General Coastal. A large portion of the site contains an area of Outstanding Landscape.



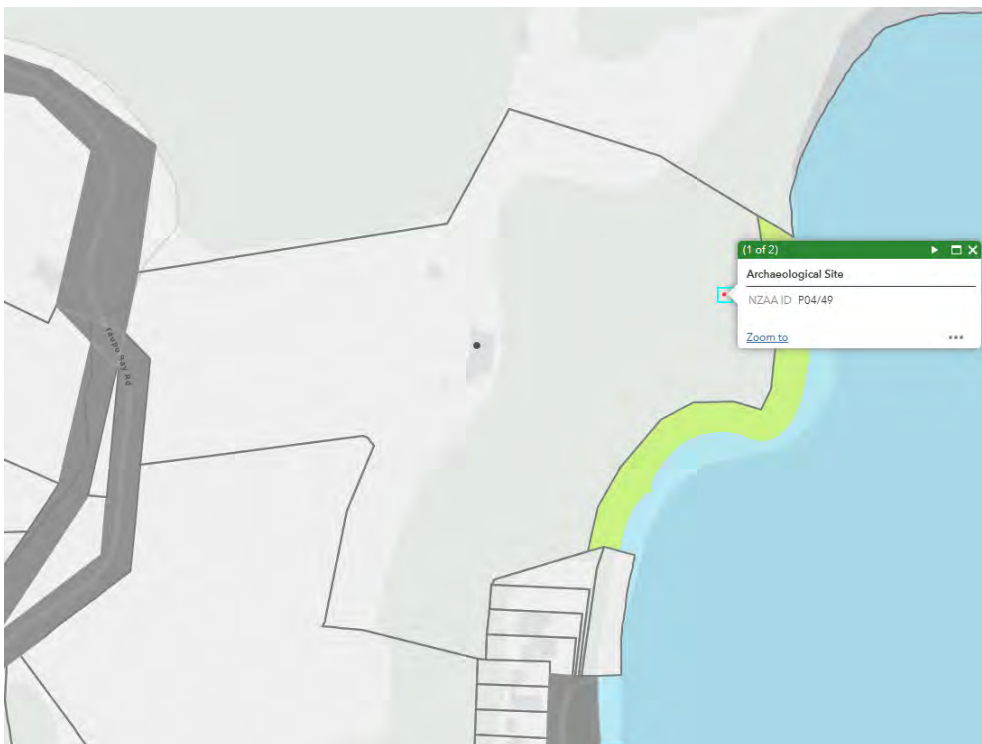
**Figure 5 – Reserves & Protected Areas [Source: Far North Maps]**

The site contains a Protected Natural Area P04006A.



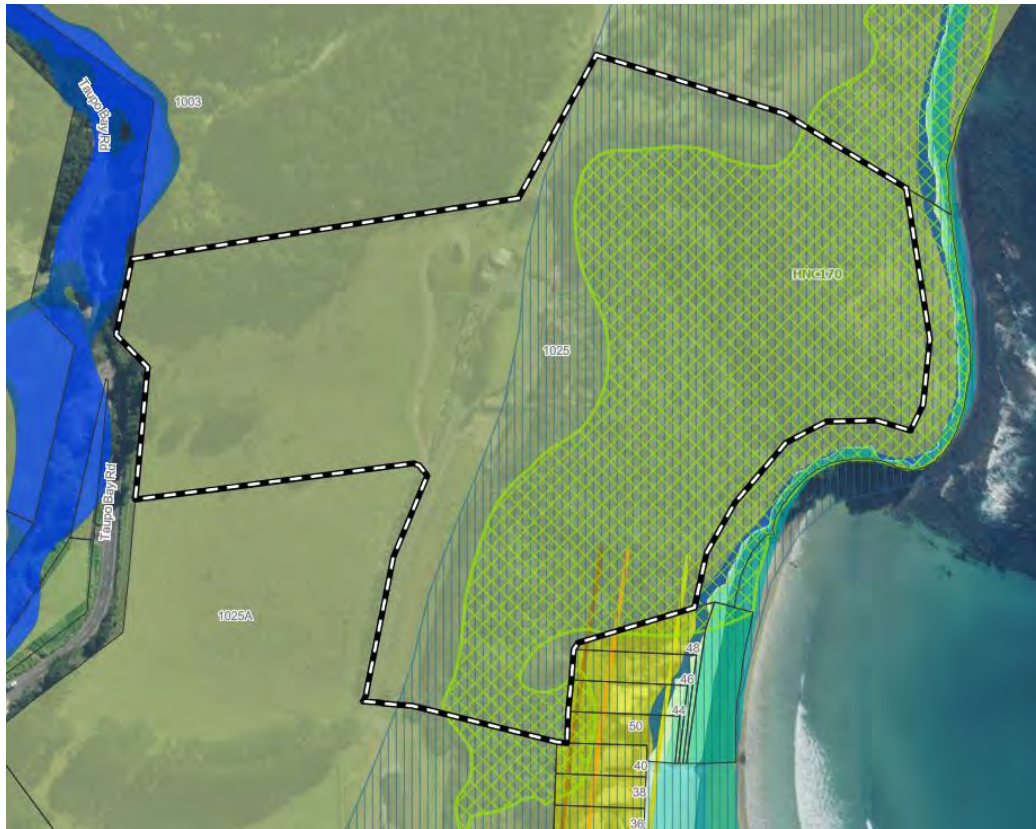
**Figure 6 – Kiwi Present Areas [Source: Far North Maps]**

The site is identified as being within a ‘kiwi present’ area.



**Figure 7 – Historic Sites [Source: Far North Maps]**

The site contains an archaeological site identified as P04/49. Details regarding this site are contained within the Archaeological Assessment in **Appendix F**.



**Figure 8 – Proposed District Plan [Source: Far North Maps]**

Under the PDP, the site is in the Rural Production Zone, with a large portion of the seaward side of the property within the Coastal Environment overlay. In addition, much of the area identified as being within the Coastal Environment contains a High Natural Character area [HNC 170]. While not pertinent to this application the southern portion of the site adjacent to the Settlement zoning is affected by Coastal Erosion [Zones 1, 2 and 3].

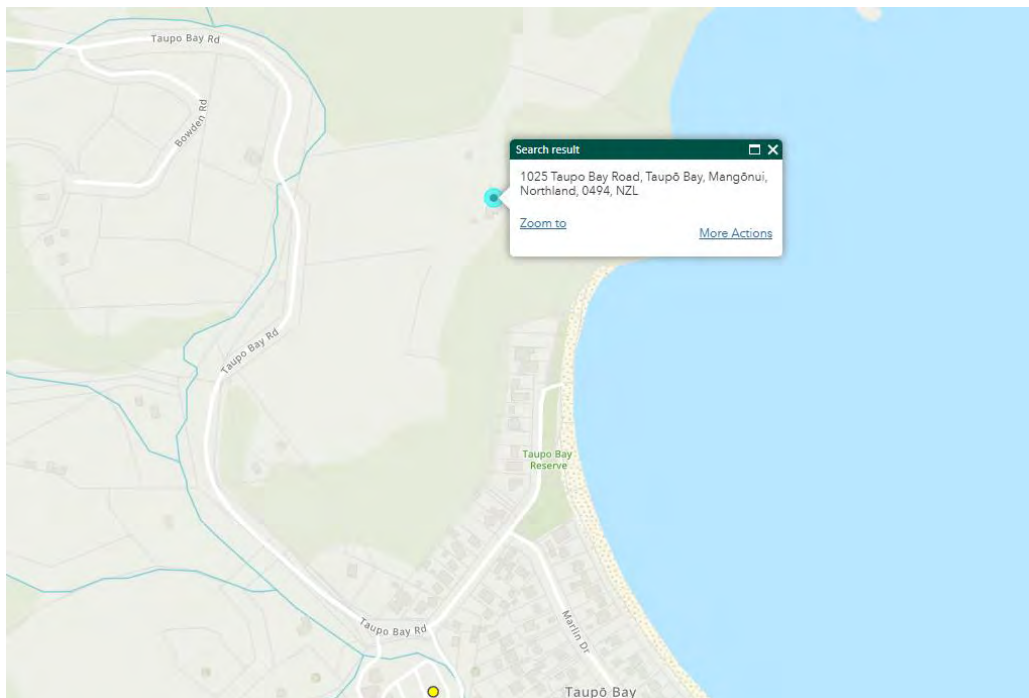
Northland Regional Council [NRC] maps show no known wetlands on the site and immediate surrounds. The site is not near or known as having an activity located on the hazardous activities or industries list [HAIL].

Soils for the site are known to be Class 6. NRC has also mapped the site as containing Coastal Erosion Hazard in the southern portion of the site. Refer to the figures below.

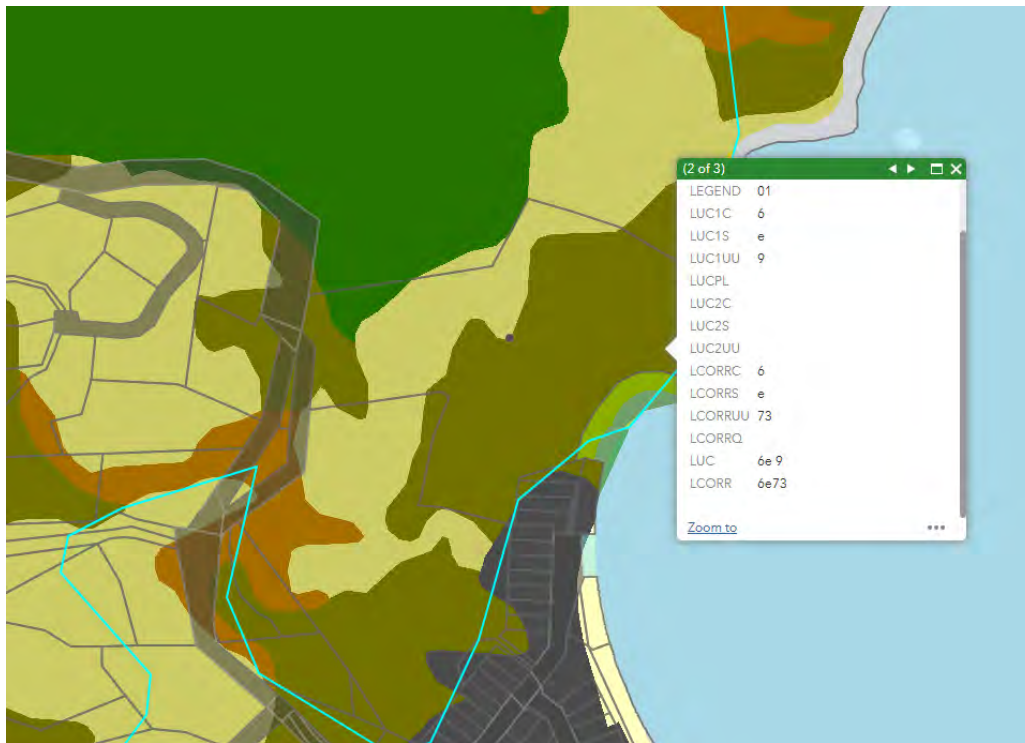




**Figure 9 – Mapped Wetlands [Source: NRC Local Maps]**



**Figure 10 – Selected Land Use Register [Source: NRC Local Maps]**



**Figure 11 – Land Cover and Land Use [Source: Far North Maps]**



**Figure 12 – Natural Hazards [Source: NRC Local Maps]**

### 3.0 RECORD OF TITLE, CONSENT NOTICES AND LAND COVENANTS

The Record of Title is attached at **Appendix 1**. There are existing consent notices applicable to the site.

#### CN 10751825.3

This consent notice related to the landholding prior to subdivision.

##### Lot 1 – DP 502408

- (i) A pa site is located in the north east of Lot 1 that is associated with remnant taro plantings. Any soil disturbance, including further plantings in this area of the site should be undertaken in such a manner to avoid disturbing the remnant taro plantings on the site. Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act to modify, damage, or destroy, an archaeological site without an archaeological authority issued pursuant to that Act. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately.

The New Zealand Police should also be consulted if the discovery includes kōiwi (human remains). Any soil disturbance within the north east portion of Lot 1 shall be undertaken in accordance with Heritage

The archaeological site is known and well understood. The proposal is supported by an Archaeological Assessment contained in **Appendix F**. The assessment concludes that archaeological sites or features are unlikely to be affected by the additions and an archaeological Authority is not required. However, a standard accidental archaeological discovery protocol should be in place throughout the project.

#### CN 12358495.3

An assessment of these consent notices is undertaken in the Landscape assessment memo in **Appendix C**. As such I won't repeat here, but summarise the comments made as they apply.



## SCHEDULE

### Lots 1 and 2 DP 567902

- (i) The individual allotment may contain, at any one point in time, only one residential unit, garage, and water tanks, with no ancillary structures.
- (ii) All new buildings, garages and water tanks shall be erected within building envelopes W and Z, as shown on survey plan DP 567902.
- (iii) All new buildings shall be designed and oriented to run along the contour of the landform, so that the structures are more effectively integrated with the topography.
- (iv) All buildings shall be finished in natural material that will weather to a dark hue, such as timber and dark stone, or in colours which have reflectance values of not more than 30% for roofing and roof fascia's and not more than 35% for building facades.  
These reflectance values shall also apply to powder coated or anodised finishes applied to aluminium joinery.  
A schedule of colours/materials shall be submitted in conjunction with any Building Consent application for the approval of Council.
- (v) All buildings shall be designed so that either:
  - i. The rooflines are irregular and stepped, with the plan of the dwelling being broken up or indented. This will allow for trees close to the dwelling, create shadows and reduce the appearance of scale; or
  - ii. The buildings have a simple, rectangular or square form, a flat roof and eaves not less than 2.4 metres in depth to eastern and northern elevations to provide shade to building facades in most light conditions. The roof-edge fascia to these elevations shall not exceed 200 mm in depth.
- (vi) Parking and utility areas shall be screened, and all cut and fill batters or retaining walls are to be revegetated within the first planting season.
- (vii) All new accessways shall be constructed so that their surfaces are finished with a visually recessive material such as dark gravel, hot mix or chip seal, or concrete with a dark oxide additive.
- (viii) All new services, including power and phone connections, shall be installed underground.
- (ix) No owner or occupier of the lot shall keep or introduce onto the lot cats, dogs or mustelids and shall take all reasonable steps to prevent the introduction of such animals by other parties.
- (x) In accordance with the approved '*Integrated Weed and Animal Pest Management and Monitoring Plan*' provided to satisfy condition 3(b) of subdivision consent RC2300052-VAR/B, the landowner shall be responsible, in perpetuity, for the on-going weed and pest management for the lot following the 5-year contracted maintenance period.
- (xi) The owner/s of the lot shall preserve the indigenous trees, bush and archaeological features identified within areas X and Y on the survey plan and shall not without the written consent of Council or Heritage New Zealand Pouhere Taonga, and then in strict compliance with any conditions imposed by those parties, cut down, damage or destroy any indigenous vegetation or archaeological features.  
The landowners shall not be deemed to be in breach of this prohibition if any such vegetation shall die from natural causes not attributable to any act or default by or on behalf of the landowners or for which the landowner is responsible.



Any maintenance work undertaken on any vegetation within areas X and Y is to be carried out under the guidance of a qualified arborist, with Council to be advised in writing of the proposed work prior to commencement and notified of the completion of the work.

The requirement for protection of the bush within covenanted areas X and Y does not preclude the continued use of the existing tracks as marked on the plan '*Revised Landscape Integration Concept*', Ref: 1282\_RevLIC2000\_20210416', as submitted in support of subdivision consent RC2300052-VAR/B.

- (xii) If grazing is to be undertaken on the lot, a stock proof fence must be established as outlined in the landscape plans approved under condition 3(c) of subdivision consent RC2300052-VAR/B.
- (i) The application proposes to extend the existing dwelling and replace the existing garage and shed with a new garage. No ancillary structures over and above the allowance are proposed.
- (ii) The proposed additions to the dwelling and redevelopment of the garage are located within the building envelope Z (refer **Appendix B**).
- (iii) The proposed additions to the dwelling and redevelopment of the garage are in proximity of the existing built development and gently traverse along the contour, as anticipated by this condition (refer **Appendix B**).
- (iv) The proposed additions to the dwelling and redevelopment of the garage will have an exterior finish with an LVR that is no greater than 15%. While the timber shingles utilised for the yoga room will initially have a higher LVR, the material will rapidly weather to the darker shade adopted by the elevation rendering (refer **Appendix B**).
- (v) The bedroom extensions have adopted the format of the existing house, incorporating the roof profiles, ridgeline steps and eaves of the balance of the building. The yoga room departs slightly from the that of the core dwelling, however it is considered to incorporate some of the 'language' of the existing lodge.
- (vi) The parking area is located close to the western lee of the building, and will be planted to create a containing screen (refer to the Landscape Plan **Appendix D**).
- (vii) No new access ways are being created through this application, albeit the extent of surfacing has been reduced from the current level.
- (viii) No new services are being installed above ground.
- (ix) No cats, dogs or mustelids are being introduced.

- (x) The obligation to undertake integrated weed and animal pest management and monitoring is not affected by this application, it shall continue.
- (xi) There are no indigenous trees, bush or archaeological features will be negatively impacted by this application. The intent of this condition is maintained and is supplemented by additional landscaping (see **Appendix D**).
- (xii) No grazing is currently undertaken on the site, nor is it proposed.

#### 4.0 RESOURCE CONSENT REQUIREMENTS

The relevant zoning, resource features, and other critical information required to determine the consenting requirements for the proposal have been considered above.

The Tables below provide an assessment against the relevant ODP and PDP standards and identifies the reasons for resource consent.

**Table 1 – General Coastal Zone**

Rule	Assessment
<b>Rule 10.6.5.1.1 Visual Amenity</b>	<p>The additions/alterations to the dwelling and redevelopment of the garage exceed 50m<sup>2</sup>. No buildings exceed the existing rolling height of the existing buildings.</p> <p>The buildings are being constructed within an approved building envelope.</p> <p><b>Controlled Activity</b></p>
<b>Rule 10.6.5.1.2 Residential Intensity</b>	<p>There is one dwelling on the site.</p> <p><b>Complies</b></p>
<b>Rule 10.6.5.1.3 Scale of Activities</b>	<p>Not applicable as residential use.</p> <p><b>Complies</b></p>
<b>Rule 10.6.5.1.4 Building Height</b>	<p>All buildings are under 8m in height.</p> <p><b>Complies</b></p>
<b>Rule 10.6.5.1.5 Sunlight</b>	<p>All buildings are sufficiently away from the site boundaries.</p>

	<b>Complies</b>
<b>Rule 10.6.5.1.6 Stormwater Management</b>	Total impermeable surfaces will be 3,188m <sup>2</sup> , which is well below the 10% permitted threshold of 8,427m <sup>2</sup> .  <b>Complies</b>
<b>Rule 10.6.5.1.7 Setback from Boundaries</b>	All buildings are sufficiently away from the site boundaries.  <b>Complies</b>
<b>Rule 10.6.5.1.9 Keeping of Animals</b>	Not applicable  <b>Complies</b>
<b>10.8.5.1.10 Transportation</b>	See below  <b>Complies</b>
<b>Rule 10.6.5.1.9 Noise</b>	To be complied with as residential use.  <b>Complies</b>
<b>Rule 10.6.5.1.11 Helicopter Landing</b>	Not applicable  <b>Complies</b>

Table 2 – District Wide Rules

Rule	Assessment
<b>12.1 Landscapes &amp; Natural Features</b>	<p>No indigenous vegetation clearance is required for the extension to the existing dwelling.</p> <p>There is no single species planting exceeding 2ha.</p> <p>Excavation includes a total cut of 193m<sup>3</sup> for the proposed additions which will be redistributed on site. There is no cut and/or filled face exceeding 1.5m.</p> <p>The proposed additions to the dwelling exceed 25m<sup>2</sup> but the additions are less than 40% of the GFA of the original dwelling and the height does not exceed the rolling height.</p>

	<b>Restricted Discretionary Activity</b>
<b>12.2 Indigenous Flora &amp; Fauna</b>	No indigenous vegetation clearance is required for the extension to the existing dwelling.  <b>Complies</b>
<b>12.3 Soils &amp; Minerals</b>	Excavation will not exceed 300m <sup>3</sup> nor will there be a cut and/or filled face exceeding 1.5m.  <b>Complies</b>
<b>12.4 Natural Hazards</b>	No development in the vicinity of any identified natural hazards.  <b>Complies</b>
<b>12.5 Heritage</b>	There are no notable trees present on the site.  There are no historic sites, buildings or objects relevant to the site.  Archaeological features are present. The rule is not affected by the proposal.  <b>Complies</b>
<b>12.7 Lakes, Rivers and Wetlands</b>	Setback from the coastal marine area is significantly more than 30m.  <b>Complies</b>
<b>12.8 Hazardous Substances</b>	Not relevant.  <b>Complies</b>
<b>12.9 Renewable Energy &amp; Energy Efficiency</b>	Not relevant.  <b>Complies</b>
<b>13 Subdivision</b>	No subdivision is proposed.  <b>Complies</b>
<b>14 Financial Contributions</b>	Not relevant.  <b>Complies</b>
<b>15 Transportation</b>	Traffic: Only 1 residential unit - exempt.

	<p><b>Complies</b></p> <p>The site can easily accommodate 2 x car parks for residential use.</p> <p><b>Complies</b></p> <p>The existing consented access will not change.</p> <p><b>Complies</b></p>
<b>16 Signs and Lighting</b>	<p>Not relevant.</p> <p><b>Complies</b></p>
<b>17 Designation</b>	<p>Not relevant.</p> <p><b>Complies</b></p>
<b>18 Special Areas</b>	<p>Not relevant.</p> <p><b>Complies</b></p>
<b>19 GMO's</b>	<p>Not relevant.</p> <p><b>Complies</b></p>

In terms of the Operative Plan, the land use component is a **Restricted Discretionary Activity**.

### **FNDC Proposed District Plan**

These comprise relevant rules that have immediate effect under the PDP.

**Table 3 – Proposed District Plan**

<b>Rule</b>	<b>Assessment</b>
<b>Hazardous Substances</b>	<p>Not relevant as no such substances proposed.</p> <p><b>Complies</b></p>
<b>Heritage Area Overlays</b>	<p>Not indicated on Far North Proposed District Plan.</p> <p><b>Complies</b></p>
<b>Historic Heritage</b>	<p>Not indicated on Far North Proposed District Plan.</p>

	<b>Complies</b>
<b>Notable Trees</b>	Not indicated on Far North Proposed District Plan.  <b>Complies</b>
<b>Sites and Areas of Significance to Māori</b>	There are no activities proposed within the SASM.  <b>Complies</b>
<b>Ecosystems and Indigenous Biodiversity</b>	No Indigenous Vegetation clearance is required.  <b>Complies</b>
<b>Activities on the Surface of Water</b>	Not indicated on Far North Proposed District Plan  <b>Complies</b>
<b>Earthworks</b>	Proposed earthworks will be in accordance with the relevant standards including GD-05 and will have an ADP applied.  <b>Complies</b>
<b>Signs</b>	Not indicated on Far North Proposed District Plan  <b>Complies</b>
<b>Orongo Bay Zone</b>	Not indicated on Far North Proposed District Plan  <b>Complies</b>
<b>Subdivision</b>	No subdivision is proposed.  <b>Restricted Discretionary</b>

No consents are required under the PDP.

## 5.0 STATUTORY CONSIDERATIONS

Section 104C governs the determination of applications for Restricted Discretionary Activities.

#### **104C Determination of applications for restricted discretionary activities**

- (1) When considering an application for a resource consent for a restricted discretionary activity, a consent authority must consider only those matters over which—
  - (a) a discretion is restricted in national environmental standards or other regulations;
  - (b) it has restricted the exercise of its discretion in its plan or proposed plan.
- (2) The consent authority may grant or refuse the application.
- (3) However, if it grants the application, the consent authority may impose conditions under [section 108](#) only for those matters over which—
  - (a) a discretion is restricted in national environmental standards or other regulations;
  - (b) it has restricted the exercise of its discretion in its plan or proposed plan.

When considering an application for resource consent, a consent authority must have regard only to those matters over which it has restricted the exercise of its discretion in its plan or proposed plan, as well as any national environmental standards or other regulations.

Section 104 of the RMA sets out matters to be considered when assessing an application for a resource consent.

#### **104 Consideration of applications**

- (1) When considering an application for a **resource** consent and any submissions received, the consent authority must, subject to [Part 2](#), have regard to—
  - (a) any actual and potential effects on the environment of allowing the activity; and
  - (ab) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity; and
  - (b) any relevant provisions of—
    - (i) a national environmental standard;
    - (ii) other regulations;
    - (iii) a national policy statement;
    - (iv) a New Zealand coastal policy statement;
    - (v) a regional policy statement or proposed regional policy statement;
    - (vi) a plan or proposed plan; and
  - (c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

The following assessment addresses all of the relevant considerations under s104 of the RMA.

The RMA definition of ‘Environment’ includes:

- (a) Ecosystems and the constituent parts, including people and communities; and*
- (b) All natural and physical resources; and*
- (c) Amenity values; and*
- (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters.*

The definition of ‘Environment’ includes the concept of a ‘future state of the environment’ where the environment as it currently exists might be modified by permitted activities and by resource consents that have been granted, and where it appears likely that those consents will be implemented.

Section 104(2) of the RMA states that:

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

This is referred to as the “permitted baseline” which includes effects on the environment arising from permitted standards that form part of a District Plan.

In the context of this application, the permitted baseline includes the permitted residential activities standards for the General Coastal zone and the relevant district wide rules. Any adverse effects associated with these activities are deemed to be acceptable to the extent that they are permitted and may be disregarded in accordance with Section 104(2).

Within the General Coastal Zone, the level of permitted activities is small due to the imposition of the residential intensity and visual amenity rules. This effectively only provides built development at 25m<sup>2</sup> for human habitation.

The RMA meaning of ‘effect’ includes:

### **3 Meaning of effect**

In this Act, unless the context otherwise requires, the term **effect** includes—

- (a) any positive or adverse effect; and
- (b) any temporary or permanent effect; and
- (c) any past, present, or future effect; and
- (d) any cumulative effect which arises over time or in combination with other effects—  
regardless of the scale, intensity, duration, or frequency of the effect, and also includes—
- (e) any potential effect of high probability; and
- (f) any potential effect of low probability which has a high potential impact.

For this application, the potential adverse effects to be assessed are those arising from aspects of the proposal that have been identified as requiring a resource consent in the **Tables** above. Specifically those in relation to the identified matters of discretion applying to visual amenity and buildings within outstanding landscapes.

## **Section 104(1)(a) Assessment of Effects on the Environment**

### Visual Amenity



The additions to the existing dwelling along with the redevelopment of the garage exceed the permitted activity standard. All proposed development is located within a building envelope approved under a previous resource consent (refer **Appendix B**).

A memo has been prepared by Littoralis Landscape Architecture addressing the visual amenity effects from the proposed additions to the dwelling and redevelopment of the garage. This memo compliments the original assessment of landscape, natural character and visual effects undertaken by Littoralis Landscape Architecture for the subdivision application in 2020 (see **Appendix C**). The memo is accompanied by a suite of photographs demonstrating the visual effects of the proposed application. As such I do not intend to repeat the content of the landscape assessment memo.

In summary the memo concludes that the potential adverse visual amenity effects range from being modestly positive through to marginally adverse, but well below a level of minor. With the benefit of 3-5 years of vegetative growth and weathering of the yoga room shingles, the proposal will represent a net reduction of visual effects from the status quo, which is already at a very limited level of impact. As such it is considered that the effects of the proposal will be less than minor.

#### Buildings within Outstanding Landscapes

The additions to the dwelling do not exceed 40% of the gross floor area of the existing structure and are no greater than the rolling height of the existing dwelling. The memo prepared by Littoralis Landscape Architecture addresses landscape and natural character effects from the proposed additions to the dwelling and redevelopment of the garage. This memo compliments the original assessment of landscape, natural character and visual effects undertaken by Littoralis Landscape Architecture for the subdivision application in 2020 (see **Appendix C**). The memo is accompanied by a suite of photographs demonstrating the visual effects of the proposed application. As such I do not intend to repeat the content of the landscape assessment memo.

In summary the memo concludes that the landscape effects of a building development that complies with the conditions and guidelines applying to the site were assessed by the 2020 reporting as being initially less than minor and ultimately insignificant. The proposal has embraced the parameters and principles conveyed by the relevant conditions and guidelines in a sensitive and fulsome manner, so our 2020 predictions can be confidently reinforced by the memorandum. As such it is considered that the effects of the proposal will be less than minor.

#### Summary

The consent notice on the title envisages one dwelling and a garage, which is what the site will contain through this resource consent application. The effects of these two components on the site

are understood, which is why it has been stipulated on a consent notice attached to the title. The application conforms with the consent notices on the title.

The application of the Landscape Design in **Appendix D** compliments the landscape treatment that currently applies to the site to better integrate all built development. Furthermore the reduction in quantum of total impermeable surface will improve infiltration and lesser discharge of stormwater on the site.

It is noted the Regional Policy Statement for Northland, and the PDP, no longer identify the subject site as containing an Outstanding Natural Landscape. The assessment undertaken for the Regional Policy Statement is more recent than that undertaken for the ODP and reflects the changing landscape and the criteria necessary for identifying a landscape as outstanding.

While the site is identified as containing an area of High Natural Character, it does not apply to any areas where the additions are proposed.

Overall it is considered that any potential effects from the proposal will be less than minor.

#### **Section 104(1)(ab) Any measures to achieve positive effects**

Positive effects arising from the application include enabling the efficient use of land in the General Coastal zone in accordance with the consent notices that apply to the site. The built development proposed on the applicant's site is anticipated through a previously approved resource consent.

#### **Section 104 (b)(i) and (ii) National Environmental Standards & Other Regulations**

There are no applicable National Environmental Standards. It is concluded that the site is not a HAIL site and that the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health does not apply to this proposal. Furthermore, the activity is not affected by the NES – Freshwater due to separation distances from existing wetlands.

#### **Section 104 (b)(iii) National Policy Statement(s)**

In terms of relevant National Policy Statements [**NPS**], the NPS for Highly Productive Land does not apply to this site.

No indigenous vegetation is proposed for removal so the NPS for Indigenous Biodiversity is not relevant.

#### **Section 104 (b)(iv) New Zealand Coastal Policy Statement**

The New Zealand Coastal Policy Statement 2010 [**NZCPS**] contains objectives and policies designed to achieve the sustainable management purpose of the RMA in respect of New Zealand's Coastal environment.

It is relevant to this application to the extent that the lower order regional and district plans must consistently give effect to the NZCPS in terms of any proposed subdivision, use or development of land or coastal areas comprising the coastal environment.

As identified earlier in this report the Landscape Assessment (**Appendix C**) concludes that the application has proactively responded to the principles arising from the earlier contribution to the 2020 subdivision consent (2300052-RMASUB). Potential adverse effects upon visual amenity, natural character and landscape values would be nominal and less than minor. In addition, the proposal is technically an RDA activity due to the now irrelevant ONL zoning and in reality, is a simple Controlled Activity which would ordinarily align with the NZCPS.

For the reasons above, the proposal is considered consistent with the NZCPS.

#### **Section 104 (b)(v) Regional Policy Statement or Proposed Regional Policy Statement**

The subject site is within the Northland region and is subject to the governing objectives and policies of the operative Regional Policy Statement for Northland (operative May 2016).

With respect to any identified features, the site is partially located within the Coastal Environment, and a portion of the site is identified as containing a High Natural Character area. The area in which the additions to the dwelling is located are not implicated by the High Natural Character area. It is noted that the area in which the redevelopment of the garage is located is outside of the coastal environment.

It is noted the Regional Policy Statement no longer identifies the subject site as containing an Outstanding Natural Landscape. The assessment undertaken for the Regional Policy Statement reflects the changing landscape and the criteria necessary for identifying a landscape as outstanding.

Public access is not affected by the proposal.

The Archaeological report contained in **Appendix F** confirms that archaeological sites or features are unlikely to be affected by the additions and an archaeological Authority is not required. It goes on to recommend a standard accidental archaeological discovery protocol be put in place throughout the project.

There are not considered to be any other relevant matters that pertain to this application that requires consideration over and above what is already considered by way of the ODP / PDP consideration above.

Overall, it is considered that the proposal would not be inconsistent with the Northland Regional Policy Statement.

### **Section 104 (b)(vi) Plans or Proposed Plans**

This application is subject to the provisions of the ODP and is subject to consideration (limited weight) of the PDP objectives and policies. The site is zoned General Coastal in the ODP and Rural Production in the PDP. In terms of the ODP it is to be assessed in terms of the objectives and policies for the Coastal Environment, the General Coastal Zone and Landscapes and Natural Features.

#### Operative District Plan

**Table 4 – Coastal Environment Assessment**

<b>Matter</b>	<b>Assessment</b>
10.3.1 To manage coastal areas in a manner that avoids adverse effects from subdivision, use and development. Where it is not practicable to avoid adverse effects from subdivision use or development, but it is appropriate for the development to proceed, adverse effects of subdivision use or development should be remedied or mitigated.	The proposition is that this application aligns with the consent notice applied to the site and avoids adverse effects whilst mitigating localised effects resulting from the built development proposed. This aligns with the objective.

Matter	Assessment
<p>10.3.2 To preserve, and where appropriate in relation to other objectives, to restore, rehabilitate protect or enhance:</p> <ul style="list-style-type: none"> <li>▪ the natural character of the coastline and coastal environment;</li> <li>▪ areas of significant indigenous vegetation and significant habitats of indigenous fauna;</li> <li>▪ outstanding landscapes and natural features;</li> <li>▪ the open space and amenity values of the coastal environment;</li> <li>▪ water quality and soil conservation (insofar as it is within the jurisdiction of the Council).</li> </ul>	<p>As above, these are largely met through complying with the consent notices that apply to the site and the implementation of the Landscape Design.</p>
<p>10.3.3 To engage effectively with Māori to ensure that their relationship with their culture and traditions and taonga is identified, recognised and provided for.</p>	<p>The proposal does not impact on Māori or their relationship with their culture and traditions and taonga.</p>
<p>10.3.4 To maintain and enhance public access to and along the coast whilst ensuring that such access does not adversely affect the natural and physical resources of the coastal environment, including Maori cultural values and public health and safety.</p>	<p>Public access exists on the seaward side of the property by way of an esplanade reserve. The application in no way affects the public's ability to access the coastline.</p>
<p>10.3.5 To secure future public access to and along the coast, lakes and rivers (including access for Maori) through the development process and specifically in accordance with the <i>Esplanade Priority areas</i> maps in the District Plan.</p>	<p>Not relevant.</p>
<p>10.3.6 To minimise adverse effects from activities in the coastal environment that cross the Coastal Marine Area boundary.</p>	<p>Not relevant.</p>

Matter	Assessment
10.3.7 To avoid, remedy or mitigate adverse effects on the environment through the provision of adequate land-based services for mooring areas, boat ramps and other marine facilities.	Not relevant.
10.3.8 To ensure provision of sufficient water storage to meet the needs of coastal communities all year round.	Sufficient water is already provided to the existing dwelling. Two additional water tanks are proposed in proximity of the redeveloped garage.
10.3.9 To facilitate the sustainable management of natural and physical resources in an integrated way to achieve superior outcomes to more traditional forms of subdivision, use and development through management plans and integrated development.	Not relevant. As mentioned, the appropriate utilisation of this site has been determined through a previous application and consent notices applied to the site. This application accords with the consent notices that apply to the site.
<p>10.4.1 That the Council only allows appropriate subdivision, use and development in the coastal environment. Appropriate subdivision use and development is that where the activity generally:</p> <p>(a) recognises and provides for those features and elements that contribute to the natural character of an area that may require preservation, restoration or enhancement; and</p> <p>(b) is in a location and of a scale and design that minimises adverse effects on the natural character of the coastal environment; and</p> <p>(c) has adequate services provided in a manner that minimises adverse effects on the coastal environment and does not adversely affect the safety and efficiency of the roading network; and</p> <p><i>Continued .....</i></p>	<p>Appropriate use and development have been determined through a previous consent and consent notices applied to ensure that appropriate development is undertaken. This application accords with the consent notices that apply to the site.</p> <p>The location, scale and design of the building platforms have been assessed as appropriate and relates to less than minor effects to natural character of the coastal environment (visual amenity).</p> <p>Adequate services exist, this application does nothing to change the status quo in this respect.</p>
10.4.2 That sprawling or sporadic subdivision and development in the coastal environment be avoided through the consolidation of	There is no increase in the number of buildings on the site through this application. The site, through consent notices, anticipates one

Matter	Assessment
subdivision and development as far as practicable, within or adjoining built up areas, to the extent that this is consistent with the other objectives and policies of the Plan.	dwelling and a garage. This application accords with the consent notices that apply to the site.
10.4.3 That the ecological values of significant coastal indigenous vegetation and significant habitats are maintained in any subdivision, use or development in the coastal environment.	The proposed development does not encroach on any areas of indigenous vegetation, or any areas identified as containing High Natural Character.
10.4.4 That public access to and along the coast be provided, where it is compatible with the preservation of the natural character, and amenity, cultural, heritage and spiritual values of the coastal environment, and avoids adverse effects in erosion prone areas;	Council has an esplanade reserve on the seaward side of the site.
10.4.5 That access by tangata whenua to ancestral lands, sites of significance to Maori, maahinga mataitai, taiapure and kaimoana areas in the coastal marine area be provided for in the development and ongoing management of subdivision and land use proposals and in the development and administration of the rules of the Plan and by non-regulatory methods. Refer <i>Chapter 2</i> , and in particular <i>Section 2.5</i> , and Council's <i>Tangata Whenua Values and Perspectives(2004)</i> .	Not relevant.
10.4.6 That activities and innovative development including subdivision, which provide superior outcomes and which permanently protect, rehabilitate and/or enhance the natural character of the coastal environment, particularly through the establishment and ongoing management of indigenous vegetation and habitats, will be encouraged by the Council.	Ongoing management of indigenous vegetation and habitats, including the control of weeds and animal pest management, is already in place through the consent notice applying to the site.

Matter	Assessment
10.4.7 To ensure the adverse effects of land-based activities associated with maritime facilities including mooring areas and boat ramps are avoided, remedied or mitigated through the provision of adequate services, including where appropriate: (a) parking (b) rubbish disposal (c) waste disposal (d) dinghy racks	Not relevant.
10.4.8 That development avoids, remedies or mitigates adverse effects on the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga.	The applicant has considered effects that may be associated with Māori relationships with their culture and traditions and taonga. The development is not considered to incur any effects in this regard.
10.4.9 That development avoids, where practicable, areas where natural hazards could adversely affect that development and/or could pose a risk to the health and safety of people.	The proposal avoids the mapped natural hazards which are around at the southern extent of the site.
10.4.10 To take into account the need for a year-round water supply, whether this involves reticulation or on-site storage, when considering applications for subdivision, use and development.	Adequate services exist, this application does nothing to change the status quo in this respect.
10.4.11 To promote land use practices that minimise erosion and sediment run-off, and storm water and wastewater from catchments that have the potential to enter the Coastal Marine Area.	This can be conditioned at time of development.



Matter	Assessment
<p>10.4.12 That the adverse effects of development on the natural character and amenity values of the coastal environment will be minimised through:</p> <ul style="list-style-type: none"> <li>(a) the siting of buildings relative to the skyline, ridges, headlands and natural features;</li> <li>(b) the number of buildings and intensity of development;</li> <li>(c) the colour and reflectivity of buildings;</li> <li>(d) the landscaping (including planting) of the site;</li> <li>(e) the location and design of vehicle access, manoeuvring and parking areas.</li> </ul>	<p>The Landscape Assessment provided in <b>Appendix C</b> concludes that the effects will be nominal and less than minor.</p>

**Table 5 – General Coastal Zone Assessment**

Matter	Assessment
10.6.3.1 To provide for appropriate subdivision, use and development consistent with the need to preserve its natural character.	The proposal is considered to represent appropriate development incurring effects that are less than minor in accordance with the consent notices that apply to the site, approved under a previous resource consent.
10.6.3.2 To preserve the natural character of the coastal environment and protect it from inappropriate subdivision, use and development.	As above for 10.6.3.1 and matters assessed in Table 4.
10.6.3.3 To manage the use of natural and physical resources (excluding minerals) in the general coastal area to meet the reasonably foreseeable needs of future generations.	The proposal is considered to be good use of natural and physical resources. Area Y is protected to ensure it is maintained for future generations.
10.6.4.1 That a wide range of activities be permitted in the General Coastal Zone, where their effects are compatible with the preservation of the natural character of the coastal environment.	The activities which will be residential in nature have been assessed as being appropriate and compatible on the proposed site. Further, it is in accordance with the consent notices that apply to the site, approved under a previous resource consent.

Matter	Assessment
10.6.4.2 That the visual and landscape qualities of the coastal environment be protected from inappropriate subdivision, use and development.	The Landscape Assessment provided in <b>Appendix C</b> concludes that the effects will be nominal and less than minor.

Matter	Assessment
<p>10.6.4.3 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the zone in regards to s6 matters, and shall avoid adverse effects as far as practicable by using techniques including:</p> <p>(a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns;</p> <p>(b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;</p> <p>(c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas;</p> <p>(d) through siting of buildings and development, design of subdivisions and provision of access, that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the District. (Refer Chapter 2 and in particular Section 2.5 and Council’s “Tangata Whenua Values and Perspectives (2004)”;</p> <p>(e) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests;</p> <p>(f) protecting historic heritage through the siting of buildings and development and design of subdivisions.</p>	<p>A clustering approach is not proposed or appropriate for an extension to an existing dwelling. There is only one dwelling on the site.</p> <p>Visual impact is mitigated by way of landscape solutions.</p> <p>An esplanade reserve already exists on the seaward boundary of the site.</p> <p>The applicant has considered effects that may be associated with Māori relationships with their culture and traditions and taonga. The development is not considered to incur any effects in this regard.</p> <p>Ongoing pest and weed control already apply by way of consent notice.</p> <p>The application is supported by an archaeological assessment. The proposed additions to the dwelling and redevelopment of the garage do not adversely impact the archaeological site.</p>

Matter	Assessment
10.6.4.4 That controls be imposed to ensure that the potentially adverse effects of activities are avoided, remedied or mitigated as far as practicable.	<p>Consent notices are applied to the site to ensure that an appropriate level of development.</p> <p>The Landscape Assessment provided in <b>Appendix C</b> concludes that the effects will be nominal and less than minor.</p>
10.6.4.5 Maori are significant landowners in the General Coastal Zone and therefore activities in the zone should recognise and provide for the relationship of Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and shall take into account the principles of the Treaty of Waitangi.	The applicant has considered effects that may be associated with Māori relationships with their culture and traditions and taonga. The development is not considered to incur any effects in this regard.
10.6.4.6 The design, form, location and siting of earthworks shall have regard to the natural character of the landscape including terrain, landforms and indigenous vegetation and shall avoid, remedy or mitigate adverse effects on those features.	Earthworks are not a critical component of this application outside of the preparation of building platforms.

**Table 6 – Natural Features and Landscapes Assessment**

Matter	Assessment
12.1.3.1 To protect outstanding landscapes and natural features from inappropriate, subdivision use and development.	<p>The Landscape Assessment provided in <b>Appendix C</b> concludes that the effects will be nominal and less than minor.</p> <p>Noting that the Regional Policy Statement no longer considers this landscape to be outstanding.</p>
12.1.3.2 To protect the scientific and amenity values of outstanding natural features.	See 12.1.3.1 above

Matter	Assessment
12.1.3.3 To recognise and provide for the distinctiveness, natural diversity and complexity of landscapes as far as practicable including the complexity found locally within landscapes and the diversity of landscapes across the District.	See 12.1.3.1 above
12.1.3.4 To avoid adverse effects and to encourage positive effects resulting from land use, subdivision or development in outstanding landscapes and natural features and Māori cultural values associated with landscapes.	See 12.1.3.1 above
12.1.4.1 That both positive and adverse effects of development on outstanding natural features and landscapes be taken into account when assessing applications for resource consent.	See 12.1.3.1 above
12.1.4.2 That activities avoid, remedy or mitigate significant adverse effects on both the natural and the cultural values and elements which make up the distinctive character of outstanding natural features and landscapes.	See 12.1.3.1 above
12.1.4.3 That the cumulative effect of changes to the character of Outstanding Landscapes be taken into account in assessing applications for resource consent.	See 12.1.3.1 above
12.1.4.4 That the visibility of Outstanding Landscape Features, when viewed from public places, be taken into account in assessing applications for resource consent	Not relevant
12.1.4.5 That the adverse visual effect of built development on outstanding landscapes and ridgelines be avoided, remedied or mitigated.	See 12.1.3.1 above
12.1.4.6 That activities avoid or mitigate adverse effects on the scientific and amenity values associated with outstanding natural features.	Not relevant

Matter	Assessment
12.1.4.7 That the diversity of outstanding landscapes at a District-wide and local level be maintained and enhanced where practicable.	See 12.1.3.1 above
12.1.4.8 That the trend is towards the enhancement rather than the deterioration of landscape values, including the encouragement of the restoration of degraded landscapes.	See 12.1.3.1 above
12.1.4.9 That the high value of indigenous vegetation to Outstanding Landscapes be taken into account when assessing applications for resource consents.	See 12.1.3.1 above  Further, there is no development proposed on the area of the site identified as containing High Natural Character.
12.1.4.10 That landscape values be protected by encouraging development that takes in account: (a) the rarity or value of the landscape and/or landscape features; (b) the visibility of the development; (c) important views as seen from public vantage points on a public road, public reserve, the foreshore and the coastal marine area; (d) the desirability of avoiding adverse effects on the elements that contribute to the distinctive character of the coastal landscapes, especially outstanding landscapes and natural features, ridges and headlands or those features that have significant amenity value; (e) the contribution of natural patterns, composition and extensive cover of indigenous vegetation to landscape values; (f) Maori cultural values associated with landscapes; (g) the importance of the activity in enabling people and communities to provide for their social, economic and cultural well-being.	See 12.1.3.1 above

Overall, it is considered that the proposed additions to the dwelling and redevelopment of the garage would not be contrary to any applicable District Plan objective or policy. Particularly in the context that the Outstanding Landscape on this site is no longer considered relevant in the Regional Policy Statement for Northland.

### Proposed District Plan

The relevant objectives are those associated with the Coastal Environment and Rural Production Zone of the PDP. These are addressed below.

**Table 7 – Coastal Environment Overlay**

Matter	Assessment
CE-O1 - The natural character of the coastal environment is identified and managed to ensure its long-term preservation and protection for current and future generations.	The coastal environment is identified with associated rules within the PDP.
CE-O2 - Land use and subdivision in the coastal environment: <ul style="list-style-type: none"> <li>a. preserves the characteristics and qualities of the natural character of the coastal environment;</li> <li>b. is consistent with the surrounding land use;</li> <li>c. does not result in urban sprawl occurring outside of urban zones;</li> <li>d. promotes restoration and enhancement of the natural character of the coastal environment; and</li> <li>e. recognises tangata whenua needs for ancestral use of whenua Māori.</li> </ul>	The additions to the dwelling are anticipated to fit within the coastal environment with minimal adverse effects given the mitigation measures proposed. The redevelopment of the garage is not within the coastal environment.
CE-O3 - Land use and subdivision in the coastal environment within urban zones is of a scale that is consistent with existing built development.	The site is not within an urban zone.
CE-P1 - Identify the extent of the coastal environment as well as areas of high and outstanding natural character using the assessment criteria in APP1- Mapping methods and criteria.	This is done within the PDP maps.

CE-P2 - Avoid adverse effects of land use and subdivision on the characteristics and qualities of the coastal environment identified as: <ul style="list-style-type: none"> <li>a. outstanding natural character;</li> <li>b. ONL;</li> <li>c. ONF.</li> </ul>	The site does not contain any of these features.
CE-P3 - Avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of land use and subdivision on the characteristics and qualities of the coastal environment not identified as: <ul style="list-style-type: none"> <li>a. outstanding natural character;</li> <li>b. ONL;</li> <li>c. ONF.</li> </ul>	The Landscape Assessment provided in <b>Appendix C</b> concludes that the effects will be nominal and less than minor.
CE-P4 - Preserve the visual qualities, character and integrity of the coastal environment by: <ul style="list-style-type: none"> <li>a. consolidating land use and subdivision around existing urban centres and rural settlements; and</li> <li>b. avoiding sprawl or sporadic patterns of development.</li> </ul>	<p>The proposal is for additions to an existing dwelling and redevelopment of an existing garage.</p> <p>These are not anticipated to adversely affect the visual qualities and character associated with the coastal environment.</p>
CE-P5 - Enable land use and subdivision in urban zones within the coastal environment where: <ul style="list-style-type: none"> <li>a. there is adequacy and capacity of available or programmed development infrastructure; and</li> <li>b. the use is consistent with, and does not compromise the characteristics and qualities.</li> </ul>	The site is not within an urban zone.
CE-P6 – Enable farming activities within the coastal environment where: <ul style="list-style-type: none"> <li>a. the use forms part of the values that established natural character of the coastal environment; or</li> <li>b. the use is consistent with, and does not compromise the characteristics and qualities.</li> </ul>	The proposal does not relate to farming.
CE-P7 - Provide for the use of Māori Purpose zoned land and Treaty Settlement land in the coastal environment where:	The site does not relate to Māori Purpose zoned land and Treaty Settlement land.



<ul style="list-style-type: none"> <li>a. the use is consistent with the ancestral use of that land; and</li> <li>b. the use does not compromise any identified characteristics and qualities.</li> </ul>	
CE-P8 - Encourage the restoration and enhancement of the natural character of the coastal environment.	This is provided through the protected area seaward of the existing dwelling including the obligations for ongoing pest and weed control.
CE-P9 - Prohibit land use and subdivision that would result in any loss and/or destruction of the characteristics and qualities in outstanding natural character areas.	The site is not within an outstanding natural character area.
<p>CE-P10 - Manage land use and subdivision to preserve and protect the natural character of the coastal environment, and to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application:</p> <ul style="list-style-type: none"> <li>a. the presence or absence of buildings, structures or infrastructure;</li> <li>b. the temporary or permanent nature of any adverse effects;</li> <li>c. the location, scale and design of any proposed development;</li> <li>d. any means of integrating the building, structure or activity;</li> <li>e. the ability of the environment to absorb change;</li> <li>f. the need for and location of earthworks or vegetation clearance;</li> <li>g. the operational or functional need of any regionally significant infrastructure to be sited in the particular location;</li> <li>h. any viable alternative locations for the activity or development;</li> <li>i. any historical, spiritual or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6;</li> </ul>	These aspects are covered within the application above, all with effects that are less than minor in nature.

<p>j. the likelihood of the activity exacerbating natural hazards;</p> <p>k. the opportunity to enhance public access and recreation;</p> <p>l. the ability to improve the overall quality of coastal waters; and</p> <p>m. any positive contribution the development has on the characteristics and qualities.</p>	
---	--

**Table 8 – Rural Production Zone**

<b>Matter</b>	<b>Assessment</b>
RPROZ-O1 - The Rural Production zone is managed to ensure its availability for primary production activities and its long-term protection for current and future generations.	The proposed zoning is not entirely appropriate in terms of the sites ability to undertake viable rural production activities given that the majority of the site is in regenerating bush.
RPROZ-O2 - The Rural Production zone is used for primary production activities, ancillary activities that support primary production and other compatible activities that have a functional need to be in a rural environment.	As above.
<p>RPROZ-O3 - Land use and subdivision in the Rural Production zone:</p> <p>a) protects highly productive land from sterilisation and enables it to be used for more productive forms of primary production;</p> <p>b) protects primary production activities from reverse sensitivity effects that may constrain their effective and efficient operation;</p> <p>c) does not compromise the use of land for farming activities, particularly on highly productive land;</p> <p>d) does not exacerbate any natural hazards; and</p> <p>e) is able to be serviced by on-site infrastructure.</p>	The land is not identified as highly productive. All surrounding activities are residential / lifestyle in nature. Farming is not a predominant activity. Natural hazards are only present on the southern extent of the site away from any development.

RPROZ-O4 - The rural character and amenity associated with a rural working environment is maintained.	The Landscape Assessment provided in <b>Appendix C</b> concludes that the effects will be nominal and less than minor.
RPROZ-P1 Enable primary production activities, provided they internalise adverse effects onsite where practicable, while recognising that typical adverse effects associated with primary production should be anticipated and accepted within the Rural Production zone.	As above, this would not be viable in this context.
RPROZ-P2 - Ensure the Rural Production zone provides for activities that require a rural location by: <ul style="list-style-type: none"> <li>a) enabling primary production activities as the predominant land use;</li> <li>b) enabling a range of compatible activities that support primary production activities, including ancillary activities, rural produce manufacturing, rural produce retail, visitor accommodation and home businesses.</li> </ul>	Noted, however these are not proposed as the predominant land use.
RPROZ-P3 - Manage the establishment, design and location of new sensitive activities and other non-productive activities in the Rural Production Zone to avoid where possible, or otherwise mitigate, reverse sensitivity effects on primary production activities.	Not relevant.
RPROZ-P4 - Land use and subdivision activities are undertaken in a manner that maintains or enhances the rural character and amenity of the Rural Production zone, which includes: <ul style="list-style-type: none"> <li>a) a predominance of primary production activities;</li> <li>b) low density development with generally low site coverage of buildings or structures;</li> <li>c) typical adverse effects such as odour, noise and dust associated with a rural working environment; and</li> </ul>	The overall proposal has considered these matters with an overall conclusion that the approach is acceptable.

d) a diverse range of rural environments, rural character and amenity values throughout the District.	
<p>RPROZ-P5 - Avoid land use that:</p> <ul style="list-style-type: none"> <li>a) is incompatible with the purpose, character and amenity of the Rural Production zone;</li> <li>b) does not have a functional need to locate in the Rural Production zone and is more appropriately located in another zone;</li> <li>c) would result in the loss of productive capacity of highly productive land;</li> <li>d) would exacerbate natural hazards; and</li> <li>e) cannot provide appropriate on-site infrastructure.</li> </ul>	<p>The proposal is compatible with the surrounds which are more residential/lifestyle than rural in nature.</p> <p>Residential use has a functional need to be located in the coastal environment as people have been habituating these areas for generations.</p> <p>The site currently accommodates a dwelling, this is anticipated through the consent notice that applies to the site.</p> <p>The site is not highly productive.</p> <p>The site is not impacted by natural hazards that would limit the proposal.</p> <p>Appropriate infrastructure servicing the dwelling currently exists.</p>
<p>RPROZ-P6 – Avoid subdivision that:</p> <ul style="list-style-type: none"> <li>a) results in the loss of highly productive land for use by farming activities;</li> <li>b) fragments land into parcel sizes that are no longer able to support farming activities, taking into account:</li> <li>c) the type of farming proposed; and</li> <li>d) whether smaller land parcels can support more productive forms of farming due to the presence of highly productive land.</li> <li>e) provides for rural lifestyle living unless there is an environmental benefit.</li> </ul>	<p>No subdivision is proposed.</p>
RPROZ-P7 - Manage land use and subdivision to address the effects of the activity requiring resource consent, including (but not limited to)	<p>These matters have been addressed within the application.</p>

<p>consideration of the following matters where relevant to the application:</p> <ul style="list-style-type: none"> <li>a) whether the proposal will increase production potential in the zone;</li> <li>b) whether the activity relies on the productive nature of the soil;</li> <li>c) consistency with the scale and character of the rural environment;</li> <li>d) location, scale and design of buildings or structures;</li> <li>e) for subdivision or non-primary production activities:</li> <li>f) scale and compatibility with rural activities;</li> <li>g) potential reverse sensitivity effects on primary production activities and existing infrastructure;</li> <li>h) the potential for loss of highly productive land, land sterilisation or fragmentation</li> <li>i) at zone interfaces:</li> <li>j) any setbacks, fencing, screening or landscaping required to address potential conflicts;</li> <li>k) the extent to which adverse effects on adjoining or surrounding sites are mitigated and internalised within the site as far as practicable;</li> <li>l) the capacity of the site to cater for on-site infrastructure associated with the proposed activity, including whether the site has access to a water source such as an irrigation network supply, dam or aquifer;</li> <li>m) the adequacy of roading infrastructure to service the proposed activity;</li> <li>n) Any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity;</li> </ul>	
---	--

o) Any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.	
---	--

### **Section 104 (c) Other Matters**

There are no other matters that are considered relevant.

Section 88A(2) provides that “any plan or proposed plan which exists when the application is considered must be had regard to in accordance with section 104(1)(b).” This requires applications to be assessed under both the operative and proposed objective and policy frameworks from the date of notification of the proposed district plan.

In the event of differing directives between objective and policy frameworks, it is well established by case law that the weight to be given to a proposed district plan depends on what stage the relevant provisions have reached, the weight generally being greater as a proposed plan move through the notification and hearing process. In *Keystone Ridge Ltd v Auckland City Council*, the High Court held that the extent to which the provisions of a proposed plan are relevant should be considered on a case by case basis and might include:

- The extent (if any) to which the proposed measure might have been exposed to testing and independent decision making;
- Circumstances of injustice; and
- The extent to which a new measure, or the absence of one, might implement a coherent pattern of objectives and policies in a plan.

In my view the PDP has not gone through the sufficient process to allow a considered view of the objectives and policies for the Rural Production Zone with a Coastal Environment overlay however this has been provided.

The assessment of the relevant objectives and policies from the ODP and the PDP has concluded these can be met by the proposal.

## **7.0 PART II - RMA**

### **Section 5 - Purpose of the RMA**

Section 5 in Part 2 of the RMA identifies the purpose as being the sustainable management of natural and physical resources. This means managing the use of natural and physical resources in a way

that enables people and communities to provide for their social, cultural and economic well-being which sustain those resources for future generations, protecting the life supporting capacity of ecosystems, and avoiding remedying or mitigating adverse effects on the environment.

It is considered that proposal represents Part 2, Section 5 of the RMA.

## **Section 6 - Matters of National Importance**

In achieving the purpose of the Act, a range of matters are required to be recognised and provided for. This includes:

- a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
- b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:
- c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:
- d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
- e) the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga:
- f) the protection of historic heritage from inappropriate subdivision, use, and development:
- g) the protection of protected customary rights:
- h) the management of significant risks from natural hazards.

In context, the relevant items to the proposal and have been recognised and provided for.

## **Section 7 - Other Matters**

In achieving the purpose of the RMA, a range of matters are to be given particular regard. This includes:

- (a) kaitiakitanga:

- (aa) the ethic of stewardship:
- (b) the efficient use and development of natural and physical resources:
  - (ba) the efficiency of the end use of energy:
- (c) the maintenance and enhancement of amenity values:
- (d) intrinsic values of ecosystems:
- (e) [Repealed]
- (f) maintenance and enhancement of the quality of the environment:
- (g) any finite characteristics of natural and physical resources:
- (h) the protection of the habitat of trout and salmon:
- (i) the effects of climate change:
- (j) the benefits to be derived from the use and development of renewable energy.

These matters have been given particular regard through the design of the proposal.

## **Section 8 - Treaty of Waitangi**

The Far North District Council is required to take into account the principles of the Treaty of Waitangi when processing this consent. This consent application may be sent to local Iwi and hapū who may have an interest in this application.

## **8.0 CONCLUSION**

A Restricted Discretionary Activity resource consent is sought from the Far North District Council to carry out the land use activity proposed.

The proposal is considered to result in less than minor effects on the environment.

The proposal is consistent with the objectives and policies of the Far North District Plan, the Regional Policy Statement for Northland, and achieves the purpose of the RMA.



Relevant NPS' and NES' have been considered with the proposal finding consistency with their general aims and intent.



Andrew McPhee  
Consultant Planner



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

**Guaranteed Search Copy issued under Section 60 of the Land  
Transfer Act 2017**



  
R.W. Muir  
Registrar-General  
of Land

**Identifier** **1019169**  
**Land Registration District** **North Auckland**  
**Date Issued** 24 January 2022

**Prior References**  
752785

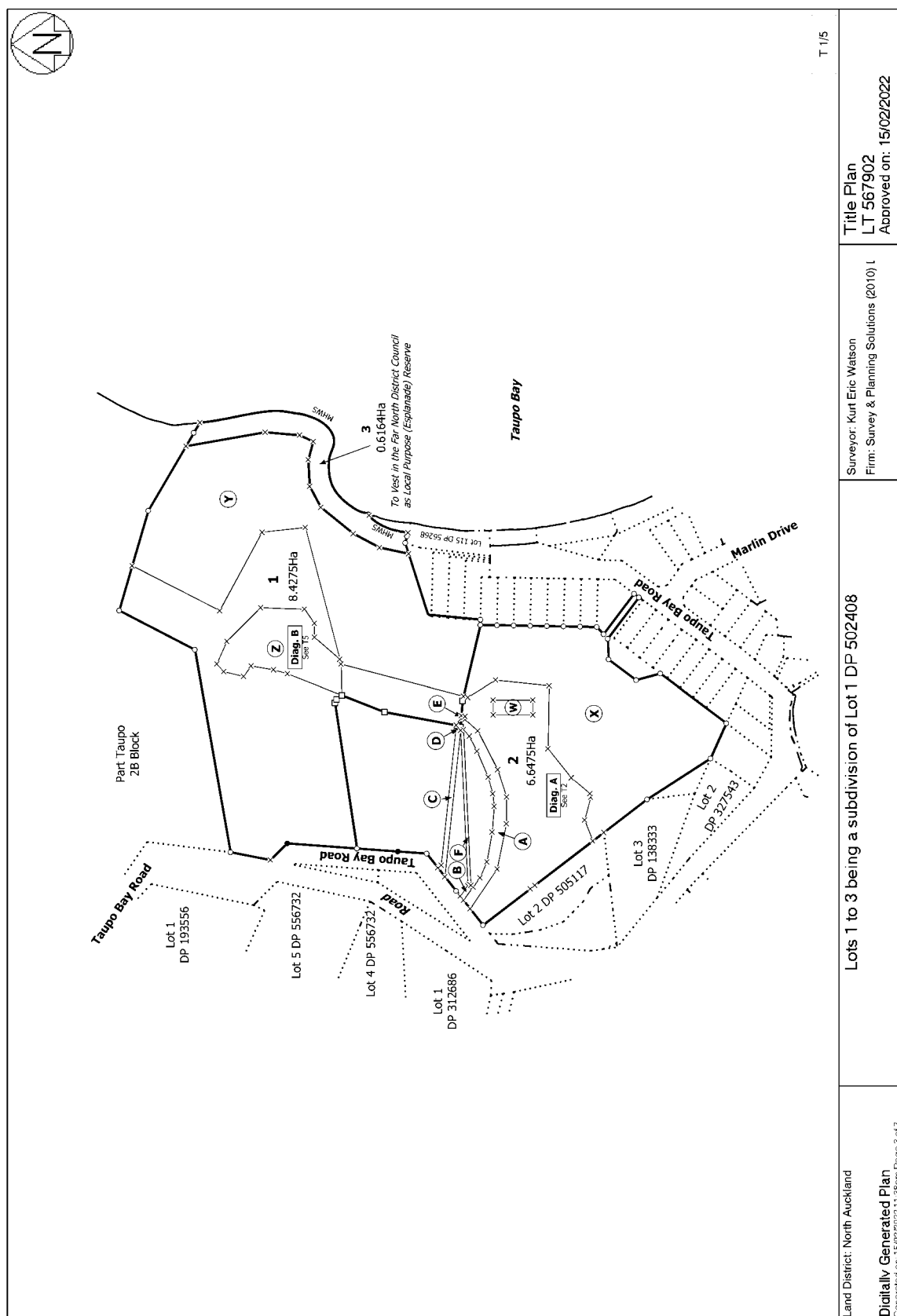
---

**Estate** Fee Simple  
**Area** 8.4275 hectares more or less  
**Legal Description** Lot 1 Deposited Plan 567902  
**Registered Owners**  
Sterling Nominees Limited

---

**Interests**

10751825.3 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 6.6.2017 at 4:55 pm  
12358495.3 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 24.1.2022 at 11:45 am  
Subject to a right to convey electricity over part marked D on DP 567902 created by Easement Instrument 12358495.4 - 24.1.2022 at 11:45 am  
Appurtenant hereto is a right of way and a right to convey telecommunications, electricity and water created by Easement Instrument 12358495.4 - 24.1.2022 at 11:45 am  
Some of the easements created by Easement Instrument 12358495.4 are subject to Section 243 (a) Resource Management Act 1991 (see DP 567902)



# View Instrument Details



<b>Instrument No</b>	10751825.3
<b>Status</b>	Registered
<b>Date &amp; Time Lodged</b>	06 June 2017 16:55
<b>Lodged By</b>	Woolston, Charlotte Paulina
<b>Instrument Type</b>	Consent Notice under s221(4)(a) Resource Management Act 1991



---

<b>Affected Computer Registers</b>	<b>Land District</b>
752785	North Auckland

---

**Annexure Schedule:** Contains 2 Pages.

---

## Signature

Signed by John Carmichael Dunlop as Territorial Authority Representative on 28/06/2017 09:06 AM

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



Private Bag 752, Manawatu Ave  
Kaitake 0440, New Zealand  
Telephone: 0800 920 029  
Phone: (09) 401 5200  
Fax: (09) 401 2137  
Email: [info@fncc.govt.nz](mailto:info@fncc.govt.nz)  
Website: [www.fncc.govt.nz](http://www.fncc.govt.nz)

*To Kaitiaki o Te Tokerau (Ki Te Raki)*

*the my place where talent  
grows in the past and future*

## THE RESOURCE MANAGEMENT ACT 1991

### SECTION 221: CONSENT NOTICE

REGARDING RC 2160433

Being the Subdivision of Pt Lot 1 DP 63144  
North Auckland Registry

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

### SCHEDULE

#### Lot 1 – DP 502408

- (i) A pa site is located in the north east of Lot 1 that is associated with remnant taro plantings. Any soil disturbance, including further plantings in this area of the site should be undertaken in such a manner to avoid disturbing the remnant taro plantings on the site. Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act to modify, damage, or destroy, an archaeological site without an archaeological authority issued pursuant to that Act. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately.

The New Zealand Police should also be consulted if the discovery includes kōiwi (human remains). Any soil disturbance within the north east portion of Lot 1 shall be undertaken in accordance with Heritage

A handwritten signature in black ink, appearing to be 'J. S. J.' or similar.





Far North  
District Council

Private Bag 752, Memorial Ave

Kaitiaki 0440, New Zealand

Telephone: 09 309 920 029

Fax: (09) 401 5290

Fax: (09) 401 2137

Email: [enck@fnc.govt.nz](mailto:enck@fnc.govt.nz)

Website: [www.fnc.govt.nz](http://www.fnc.govt.nz)

*Te Kaitiaki o Te Tokerau Ki To Raki*

*the top place where we  
want to live, work and invest*

New Zealand's Archaeological Discovery Protocol (ADP). The Archaeological Discovery Protocol should also be made available to all person(s) working on site.

SIGNED:

A handwritten signature in black ink, appearing to read 'P.J. Killalea'.

Mr Patrick John Killalea

By the FAR NORTH DISTRICT COUNCIL

Under delegated authority:

PRINCIPAL PLANNER – RESOURCE MANAGEMENT

DATED at KERIKERI this

14<sup>th</sup> day of October

2018

A handwritten signature in black ink, appearing to read 'J.P.'.



# View Instrument Details



<b>Instrument No</b>	12358495.3
<b>Status</b>	Registered
<b>Date &amp; Time Lodged</b>	24 January 2022 11:45
<b>Lodged By</b>	Kennedy, Andrew James
<b>Instrument Type</b>	Consent Notice under s221(4)(a) Resource Management Act 1991



---

<b>Affected Records of Title</b>	<b>Land District</b>
1019169	North Auckland
1019170	North Auckland

---

**Annexure Schedule** Contains 6 Pages.

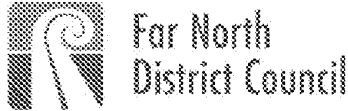
---

## Signature

Signed by Andrew James Kennedy as Territorial Authority Representative on 24/01/2022 11:44 AM

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





Phone 09 438 7522, 0800 438 7522  
Relayline 0800 438 7522  
Facsimile 09 438 7522  
Phone 09 438 7522  
Fax 09 438 7522  
Email [info@fncc.govt.nz](mailto:info@fncc.govt.nz)  
Website [www.fncc.govt.nz](http://www.fncc.govt.nz)

*Te Kaitiaki o Te Kaitiaki o Te Kaitiaki*

*The top plan shows what  
will be the look and feel*

## THE RESOURCE MANAGEMENT ACT 1991

### SECTION 221: CONSENT NOTICE

#### REGARDING RC2300052-VAR/B

Being the subdivision of Lot 1 DP 502408  
North Auckland Registry

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

### SCHEDULE

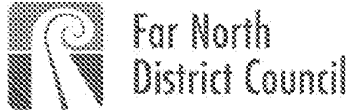
#### Lots 1 and 2 DP 567902

- (i) The individual allotment may contain, at any one point in time, only one residential unit, garage, and water tanks, with no ancillary structures.
- (ii) All new buildings, garages and water tanks shall be erected within building envelopes W and Z, as shown on survey plan DP 567902.
- (iii) All new buildings shall be designed and oriented to run along the contour of the landform, so that the structures are more effectively integrated with the topography.
- (iv) All buildings shall be finished in natural material that will weather to a dark hue, such as timber and dark stone, or in colours which have reflectance values of not more than 30% for roofing and roof fascia's and not more than 35% for building facades.

These reflectance values shall also apply to powder coated or anodised finishes applied to aluminium joinery.

A schedule of colours/materials shall be submitted in conjunction with any Building Consent application for the approval of Council.





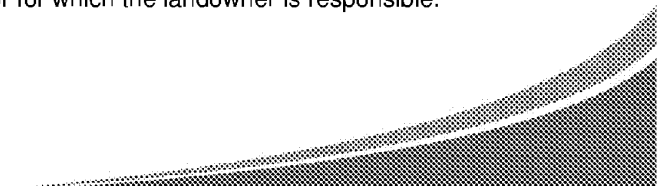
Phone 09 432 8800
Mobile 0440 100 100
Facsimile 09 432 8800
Phone 061 432 8800
Fax 09 432 8800
Email <a href="mailto:info@fncc.govt.nz">info@fncc.govt.nz</a>
Website <a href="http://www.fncc.govt.nz">www.fncc.govt.nz</a>

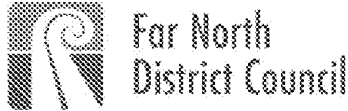
*Te Kaitiaki o Te Kaitiaki o Te Kaitiaki*

*The top plan shows what  
will be the look and feel*

- (v) All buildings shall be designed so that either:
  - i. The rooflines are irregular and stepped, with the plan of the dwelling being broken up or indented. This will allow for trees close to the dwelling, create shadows and reduce the appearance of scale; or
  - ii. The buildings have a simple, rectangular or square form, a flat roof and eaves not less than 2.4 metres in depth to eastern and northern elevations to provide shade to building facades in most light conditions. The roof-edge fascia to these elevations shall not exceed 200 mm in depth.
- (vi) Parking and utility areas shall be screened, and all cut and fill batters or retaining walls are to be revegetated within the first planting season.
- (vii) All new accessways shall be constructed so that their surfaces are finished with a visually recessive material such as dark gravel, hot mix or chip seal, or concrete with a dark oxide additive.
- (viii) All new services, including power and phone connections, shall be installed underground.
- (ix) No owner or occupier of the lot shall keep or introduce onto the lot cats, dogs or mustelids and shall take all reasonable steps to prevent the introduction of such animals by other parties.
- (x) In accordance with the approved *'Integrated Weed and Animal Pest Management and Monitoring Plan'* provided to satisfy condition 3(b) of subdivision consent RC2300052-VAR/B, the landowner shall be responsible, in perpetuity, for the on-going weed and pest management for the lot following the 5-year contracted maintenance period.
- (xi) The owner/s of the lot shall preserve the indigenous trees, bush and archaeological features identified within areas X and Y on the survey plan and shall not without the written consent of Council or Heritage New Zealand Pouhere Taonga, and then in strict compliance with any conditions imposed by those parties, cut down, damage or destroy any indigenous vegetation or archaeological features.

The landowners shall not be deemed to be in breach of this prohibition if any such vegetation shall die from natural causes not attributable to any act or default by or on behalf of the landowners or for which the landowner is responsible.





Phone 09 437 8900
Relayline 0800 000 000
Facsimile 09 437 8900
Phone 09 437 8900
Fax 09 437 8900
Email <a href="mailto:info@fncc.govt.nz">info@fncc.govt.nz</a>
Website <a href="http://www.fncc.govt.nz">www.fncc.govt.nz</a>

*Te Kaitiaki o Te Kaitiaki o Te Kaitiaki*

*The top plan shows what  
work is to be done and when*

Any maintenance work undertaken on any vegetation within areas X and Y is to be carried out under the guidance of a qualified arborist, with Council to be advised in writing of the proposed work prior to commencement and notified of the completion of the work.

The requirement for protection of the bush within covenanted areas X and Y does not preclude the continued use of the existing tracks as marked on the plan 'Revised Landscape Integration Concept', Ref: 1282\_RevLIC2000\_20210416, as submitted in support of subdivision consent RC2300052-VAR/B.

- (xii) If grazing is to be undertaken on the lot, a stock proof fence must be established as outlined in the landscape plans approved under condition 3(c) of subdivision consent RC2300052-VAR/B.

#### Lot 2 DP 567902

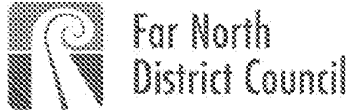
- (xiii) No new buildings shall exceed 5 metres in height above a finished ground level of RL 44.5 metres. This requirement anticipates that the north east corner of a building that fully utilises the identified building envelope may be over 5 metres above natural ground level in that area.
- (xiv) All buildings on the lot will require foundations specifically designed by a Chartered Professional Engineer experienced in geotechnical matters, in accordance with the design parameters specified in the 'Subdivision suitability report' prepared by Cook Costello, Ref. 10505-001, dated 14 July 2020, as submitted in support of subdivision consent RC2300052-VAR/B.

The design of the foundations shall include a site stability analysis based on the actual development proposed, in accordance with the recommendations of the 'Subdivision suitability report'.

The foundation design details and the results of the stability analysis shall be submitted in conjunction with a Building Consent application.

- (xv) In conjunction with the construction of any building requiring a wastewater disposal system, the lot owner shall obtain a Building Consent and install the wastewater treatment and effluent disposal system as detailed in the 'Subdivision suitability report' prepared by Cook Costello, Ref. 10505-001, dated 14 July 2020, as submitted in support of subdivision consent RC2300052-VAR/B.





Phone 09 437 1332, 09 437 1333
Referrals 09 437 1333, 09 437 1334
Facsimile 09 437 1333, 09 437 1334
Phone 09 437 1333, 09 437 1334
Fax 09 437 1333, 09 437 1334
Email <a href="mailto:info@fncc.govt.nz">info@fncc.govt.nz</a>
Website <a href="http://www.fncc.govt.nz">www.fncc.govt.nz</a>

*Te Kaitiaki o Te Kaitiaki o Te Kaitiaki*

*The top plan shows what  
will be the look and feel*

- (xvi) All stormwater originating from roofs, paved surfaces and tank overflow on the lot is to be piped and discharged in accordance with the recommendations of the 'Subdivision suitability report' prepared by Cook Costello, Ref. 10505-001, dated 14 July 2020, as submitted in support of subdivision consent RC2300052-VAR/B.

- (xvii) In conjunction with the construction of any dwelling on the lot, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of tank or other approved means and is to be positioned so that it is safely accessible for this purpose.

These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.

- (xviii) Subdivision consent RC2300052-VAR/B includes a certified '*Detailed landscape plan – Waikopua Taupo Bay*' prepared by Littoralis Landscape Architecture, reference 1282\_LAP\_20210310. Sheets 1, 2, 3, 4, 9 and 10 relate to Lot 2.

Planting areas A, B, C, and D1 shown on the approved plans shall be implemented by the end of the next planting season (May – August) directly following the completion of earthworks to establish the approved building platform on the lot.

Within two weeks of completing the planting as per the approved plan, written confirmation shall be provided by a suitably qualified and experienced person that the requirements have been satisfied and that a five year maintenance period has commenced.

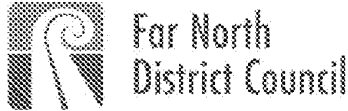
All approved planting shall be maintained to the satisfaction of Council's duly delegated officer on a continuing basis. In the event of the plants failing, they shall be replaced to the satisfaction of Council's duly delegated officer no later than the end of the planting season (May to August) immediately following failure.

- (xix) In conjunction with any building consent application for development on the site, the lot owner shall submit a detailed landscape plan for the approval of Council.

The plan shall detail planting for the purposes of visual mitigation and integration of buildings, accessways, and other modifications, using predominantly eco-sourced, locally appropriate native species.

It shall incorporate areas A, B, C and D.1 on Lot 2 as shown on the '*Detailed landscape plan*' prepared by Littoralis Landscape Architecture, reference 1282\_LAP\_20210310 (as submitted in support of variation B to resource consent RC2300052).





Phone 09 432 8800
Referrals 09 432 8800
Facsimile 09 432 8800
Phone 09 432 8800
Fax 09 432 8800
Email <a href="mailto:info@fncc.govt.nz">info@fncc.govt.nz</a>
Website <a href="http://www.fncc.govt.nz">www.fncc.govt.nz</a>

*Te Kaitiaki o Te Kaitiaki o Te Kaitiaki*

*The top plan shows what  
will be the look and feel*

The plan shall show details of re-vegetation of any exposed cut faces associated with the building or access. Specifically, the plan shall contain:

- Location and extent of any proposed buildings, access and extent of earthworks.
- Size, species and location of existing vegetation.
- Names of proposed species.
- Size of proposed stock for planting.
- Locations and spacing of proposed plants, positioned so as to achieve canopy closure within 3-5 years.
- Details of staking and other means of support for large trees.
- Details of proposed maintenance.
- Details of proposed mulch, type and depth.

Implementation of the landscape plan is to be undertaken within the first planting season (approximately March-September) following completion of the exterior of the building and maintained by the lot owner, all to the satisfaction of the Far North District Council or duly delegated officer.

- (xx) All earthworks on the lot to form a new building site must have due regard for stormwater and erosion and sediment control in accordance with the recommendations of the 'Subdivision suitability report' prepared by Cook Costello, Ref. 10505-001, dated 14<sup>th</sup> July 2020, as submitted in support of subdivision consent RC2300052-VAR/B.

All sediment control measures are to be implemented prior to earthworks commencing and be maintained until non-erodible cover is established over the site of the earthworks.

- (xxi) Details on any cut faces exceeding 1.5 metres in height or where it retains a surcharged load, such as a slope above the wall, will require specific engineering design.

This design must be provided to Council for approval before any works are undertaken.





Far North  
District Council

Phone 09 438 7132, 0800 438 7132

Referrals 09 438 7132, 0800 438 7132

Facsimile 09 438 7132

Phone 09 438 7132

Fax 09 438 7132

Email [info@fn.govt.nz](mailto:info@fn.govt.nz)

Website [www.fn.govt.nz](http://www.fn.govt.nz)

*Te Kaitiaki o Te Kaitiaki o Te Kaitiaki*

*The top plan shows what  
will be the top and bottom*

SIGNED:

A handwritten signature in black ink, appearing to read 'P.J. Killalea'.

Mr Patrick John Killalea - Authorised Officer

By the FAR NORTH DISTRICT COUNCIL

Under delegated authority:

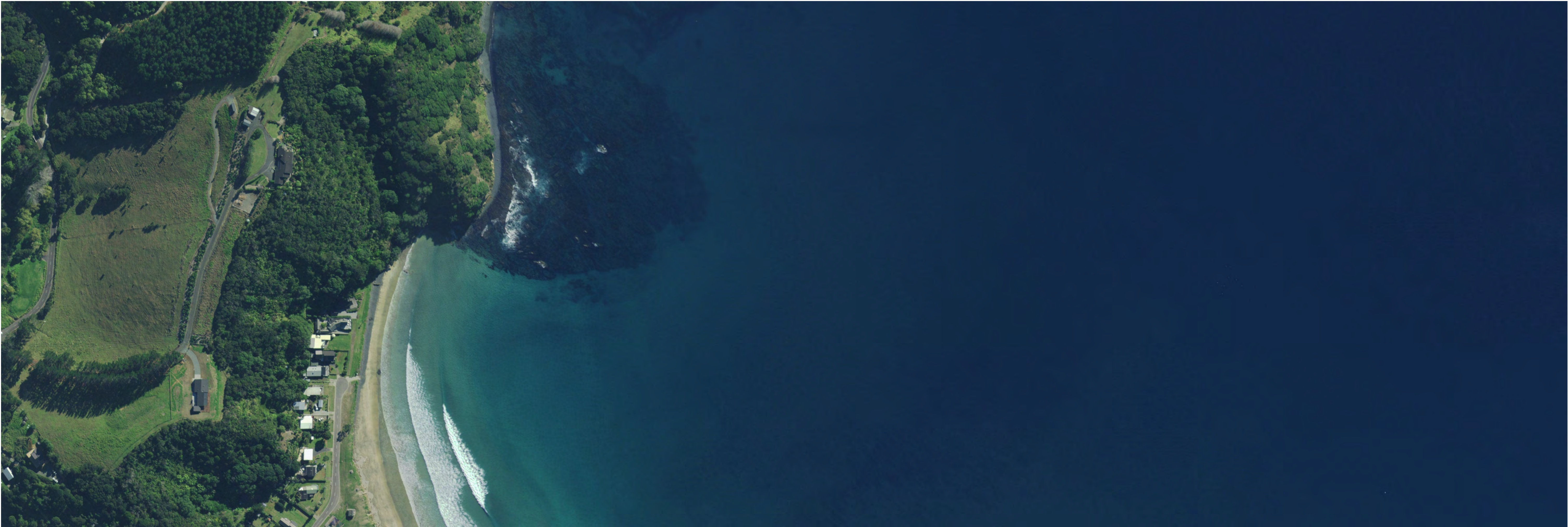
PRINCIPAL PLANNER – RESOURCE MANAGEMENT

DATED at **KERIKERI** this 18<sup>th</sup> day January 2022





RESOURCE CONSENT



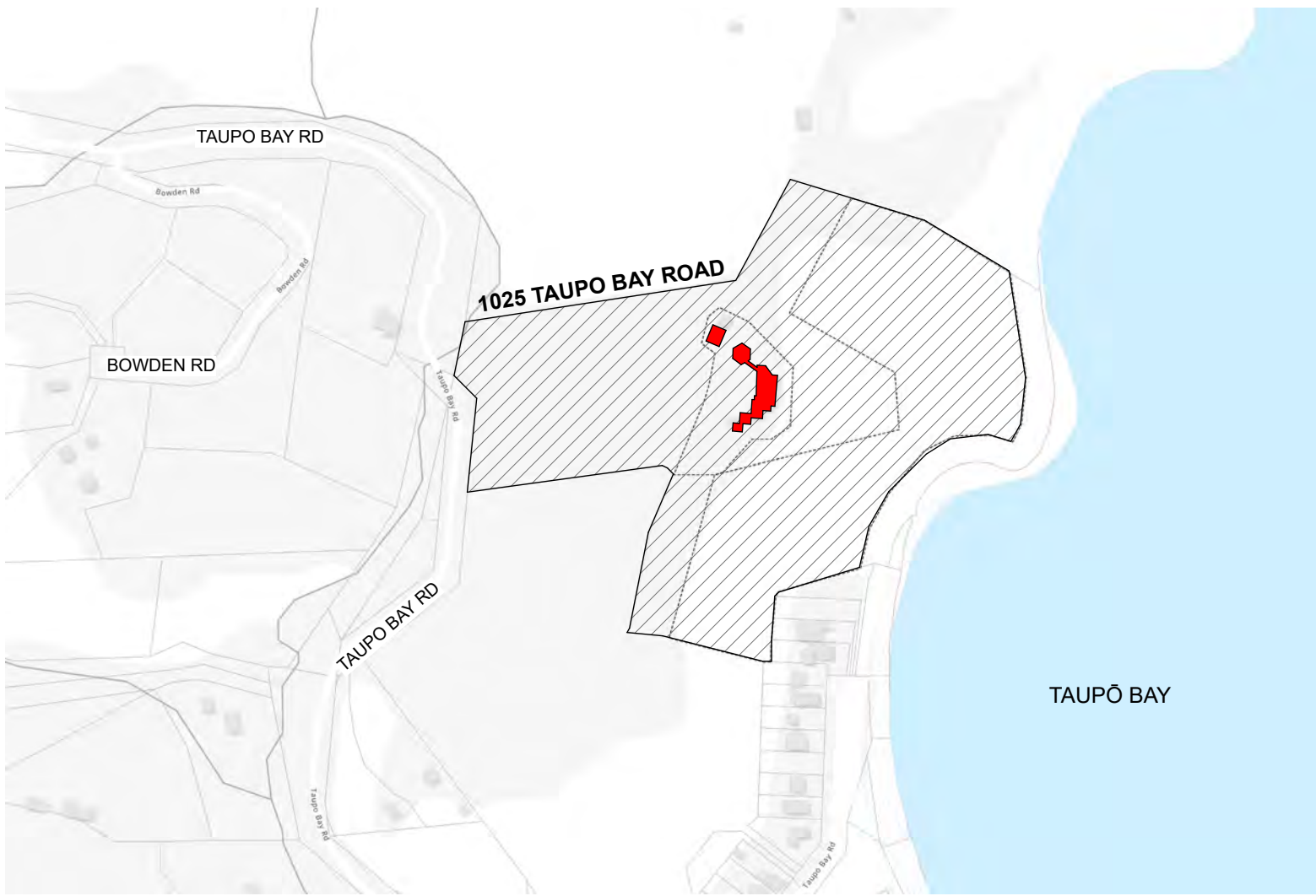
TAUPŌ BAY HOUSE ALTERATIONS

1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND

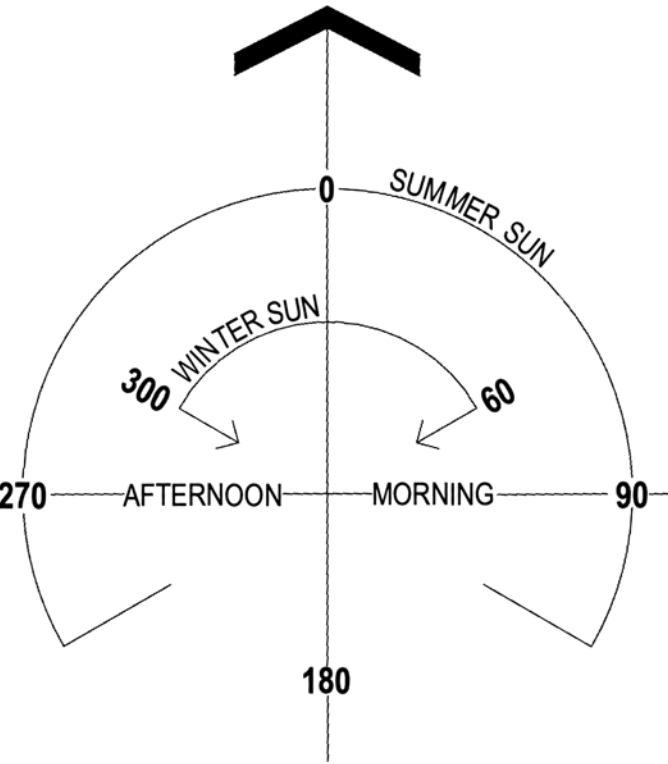
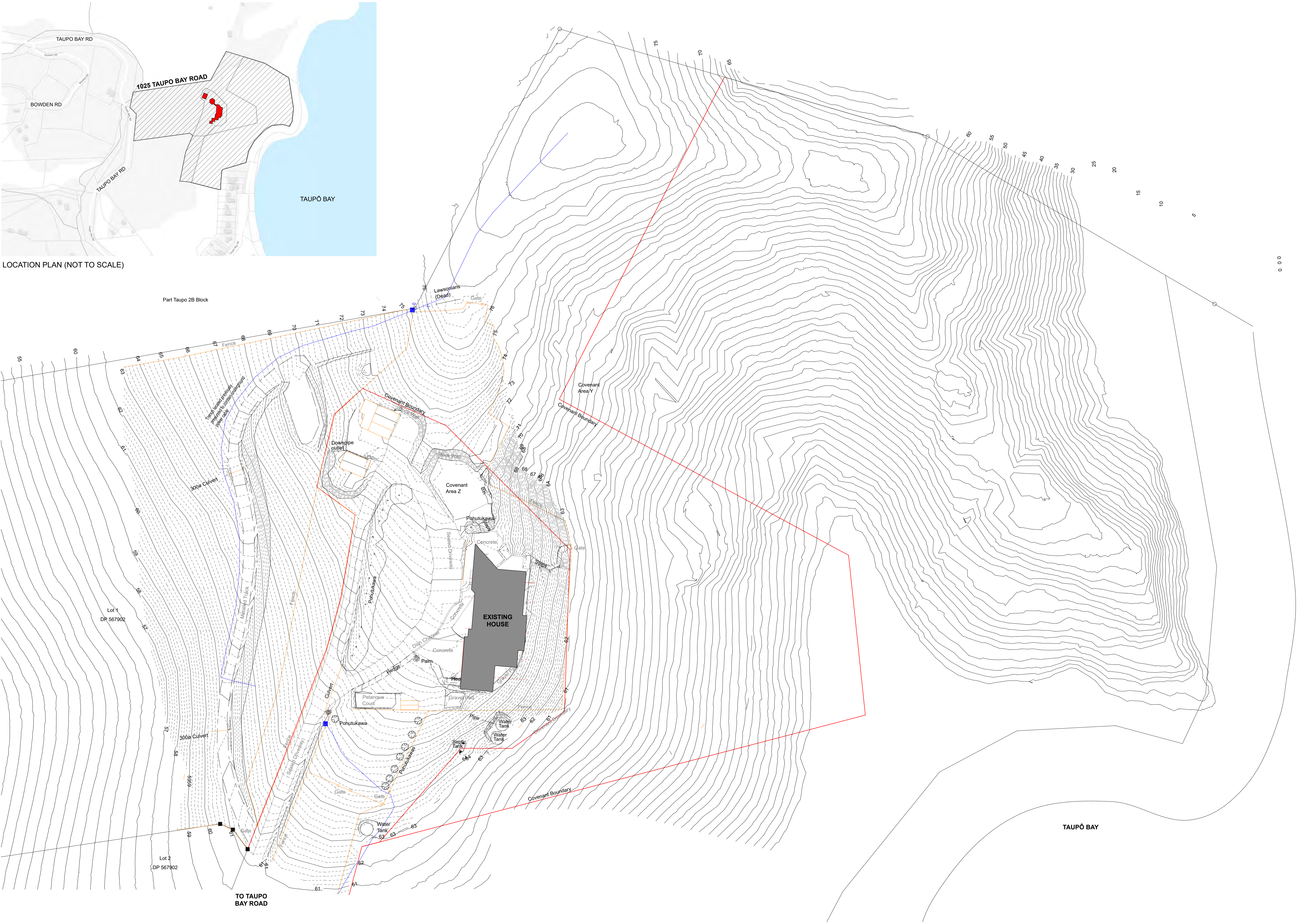
STEVEN  
SON  
LAW  
ARCHITECTS

DRAWING SCHEDULE		
1 (01)	SURVEY PLAN:	EXISTING
1 (02)	EXISTING & DEMOLITION PLAN	
1 (03)	SITE PLAN:	PROPOSED
1 (04)	GROUND FLOOR PLAN:	PROPOSED
2 (01)	PROPOSED ELEVATIONS:	HOUSE
2 (02)	PROPOSED ELEVATIONS:	HOUSE
2 (03)	PROPOSED ELEVATIONS:	GARAGE





LOCATION PLAN (NOT TO SCALE)



LEGAL DESCRIPTION

SITE ADDRESS: 1025 TAUPŌ BAY ROAD  
LOT NO.: 1  
DP: 567902  
TA: FAR NORTH DISTRICT COUNCIL  
DISTRICT PLAN ZONE: GENERAL COASTAL  
RESOURCE ZONE: OUTSTANDING LANDSCAPE  
WIND ZONE: VERY HIGH  
EARTHQUAKE ZONE: 1 (as per NZS3604:2011)  
EXPOSURE ZONE: D (as per NZS3604:2011)  
SURVEYED SITE AREA: 8.4275 HA

SURVEY INFORMATION

SURVEY INFORMATION HAS BEEN TRANSFERRED FROM SITE SURVEY (USING NZ VERTICAL DATUM) AS PREPARED BY WILLIAMS & KING REGISTERED LAND SURVEYORS, DATED 18 DECEMBER 2024. ACCOMPANIED BY 2016 LIDAR INFORMATION OF SITE SURROUNDS.

- SURVEY NOTES:**
- EXISTING LEVELS SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.
  - GAS PIPES HAVE NOT BEEN INVESTIGATED AS PART OF THIS SURVEY.

STEVEN  
LAWSON  
ARCHITECTS

STEVENS  
LAWSON  
ARCHITECTS  
LIMITED

TELEPHONE  
+64 9 377 5376

ADDRESS  
AXIS 1.1A  
1 CLEVELAND ROAD  
PARNELL  
AUCKLAND  
NEW ZEALAND

EMAIL  
MAIL@STEVENS.LAWSON.CO.NZ

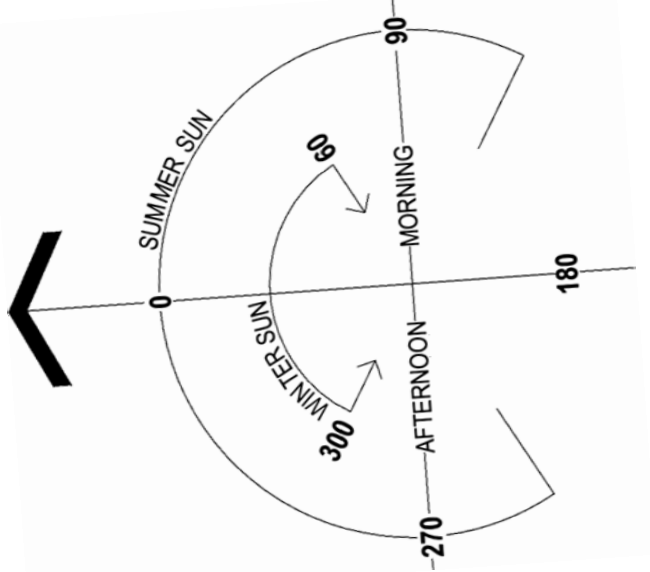
PROJECT TITLE

TAUPŌ BAY  
JASON FRIEDLANDER, 1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND  
RESOURCE CONSENT

A RESOURCE CONSENT ISSUE			26/03/25
STATUS	NO	AMENDMENTS	DATE ISSUE
SHEET TITLE			DWG NO.
SURVEY PLAN: EXISTING			(1) 01
PROJECT ID	#Project ID	SCALE	SERIES OF
CAD FILE	0238_Taupō Bay	1:500	ISSUE / REV
DATE	1/04/25	@ A1	-A

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON THE SITE. DO NOT SCALE OFF DRAWINGS. COPYRIGHT RESERVED.





**LEGAL DESCRIPTION**

SITE ADDRESS: 1025 TAUPŌ BAY ROAD  
TAUPŌ BAY, NORTHLAND 0494

LOT NO.: 1

DP: 567902

TA: FAR NORTH DISTRICT COUNCIL

DISTRICT PLAN ZONE: GENERAL COASTAL

RESOURCE ZONE: OUTSTANDING LANDSCAPE

WIND ZONE: VERY HIGH

EARTHQUAKE ZONE: 1 (as per NZS3604:2011)

EXPOSURE ZONE: D (as per NZS3604:2011)

SURVEYED SITE AREA: 8.4275 HA

**SURVEY INFORMATION**

SURVEY INFORMATION HAS BEEN TRANSFERRED FROM SITE SURVEY (USING NZ VERTICAL DATUM) AS PREPARED BY WILLIAMS & KING REGISTERED LAND SURVEYORS, DATED 18 DECEMBER 2024, ACCOMPANIED BY 2016 LIDAR INFORMATION OF SITE SURROUNDS.

**SURVEY NOTES:**

- EXISTING LEVELS SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.
- GAS PIPES HAVE NOT BEEN INVESTIGATED AS PART OF THIS SURVEY.

STEVEN  
LAWSON  
ARCHITECT

STEVENS  
LAWSON  
ARCHITECTS  
LIMITED

TELEPHONE  
+64 9 377 5376

ADDRESS  
AXIS 1.1A  
1 CLEVELAND ROAD  
PARNELL  
AUCKLAND  
NEW ZEALAND

EMAIL  
MAIL@STEVENS-LAWSON.CO.NZ

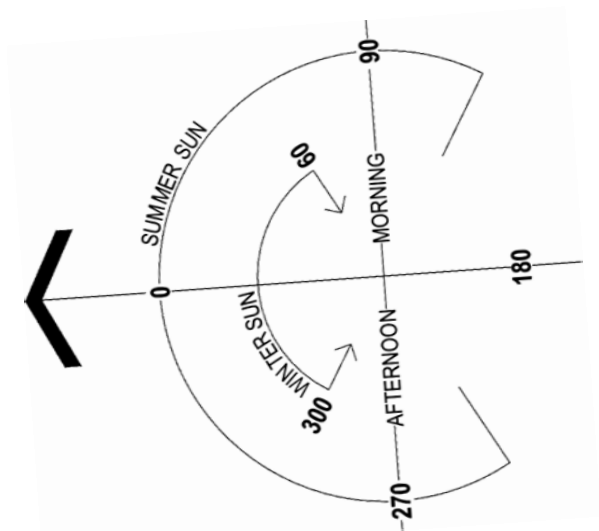
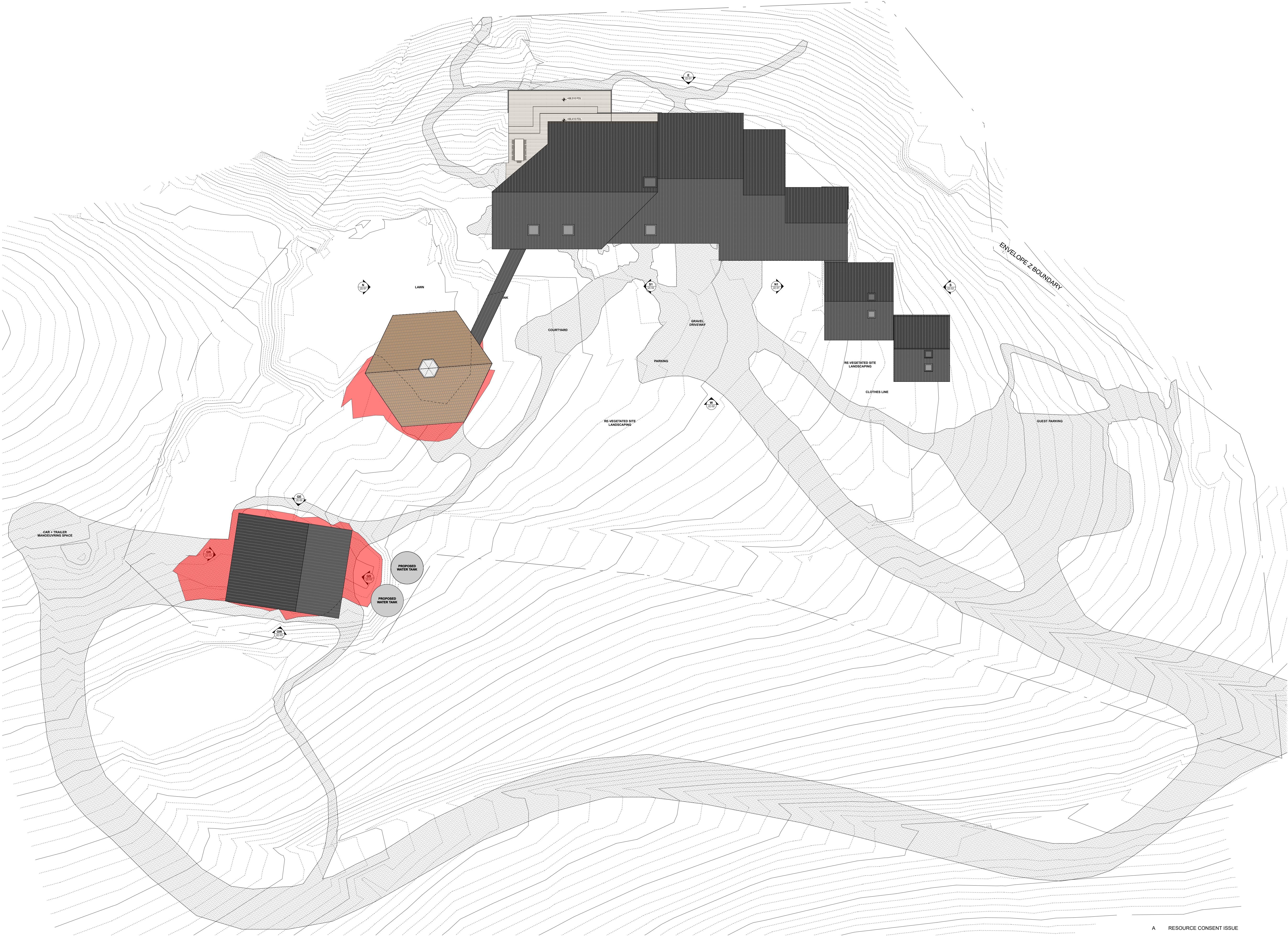
PROJECT TITLE

TAUPŌ BAY  
JASON FRIEDLANDER, 1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND  
RESOURCE CONSENT

A RESOURCE CONSENT ISSUE			26/03/25
STATUS	NO	AMENDMENTS	DATE ISSUE
SHEET TITLE			DWG NO.
EXISTING & DEMOLITION			(1) 02
PROJECT ID	#Project ID	SCALE	SERIES OF
CAD FILE	0238_Taupō Bay	1:200	ISSUE / REV
DATE	1/04/25	@ A1	-A

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON THE SITE. DO NOT SCALE OFF DRAWINGS. COPYRIGHT RESERVED.





#### LEGAL DESCRIPTION

SITE ADDRESS: 1025 TAUPŌ BAY ROAD  
TAUPŌ BAY  
NORTHLAND 0494

LOT NO.: 1  
DP: 567902  
TA: FAR NORTH DISTRICT COUNCIL  
DISTRICT PLAN ZONE: GENERAL COASTAL  
RESOURCE ZONE: OUTSTANDING LANDSCAPE  
WIND ZONE: VERY HIGH  
EARTHQUAKE ZONE: 1 (as per NZS3604:2011)  
EXPOSURE ZONE: D (as per NZS3604:2011)  
SURVEYED SITE AREA: 8.4275 HA

#### SURVEY INFORMATION

SURVEY INFORMATION HAS BEEN TRANSFERRED FROM SITE SURVEY (USING NZ VERTICAL DATUM) AS PREPARED BY WILLIAMS & KING REGISTERED LAND SURVEYORS, DATED 16 DECEMBER 2024.

0.2m CONTOURS OF SITE AREA

- SURVEY NOTES:**
- EXISTING LEVELS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  - GAS PIPES HAVE NOT BEEN INVESTIGATED AS PART OF THIS SURVEY.

#### FLOOR AREAS

EXISTING HOUSE	430m <sup>2</sup>
PROPOSED HOUSE	606m <sup>2</sup>
EXISTING GARAGE + UTILITY	163m <sup>2</sup>
PROPOSED GARAGE	113m <sup>2</sup>
EXISTING DECK	96m <sup>2</sup>
PROPOSED DECK	112m <sup>2</sup>
EXISTING GRAVEL SURFACES	3,381m <sup>2</sup>
PROPOSED GRAVEL SURFACES	2,357m <sup>2</sup>
EXISTING IMPERVIOUS TOTAL:	4,070m <sup>2</sup>
PROPOSED IMPERVIOUS TOTAL:	3,188m <sup>2</sup>

#### COMPLIANCE

<b>HEIGHT:</b>		
MAX. HEIGHT OF NEW BUILDINGS	5m	COMPLIANT
<b>PERMITTED BUILDING:</b>		
WITHIN COVENANT AREAS 'W' & 'Z'		COMPLIANT

#### CUT & FILL

<b>CUT</b>	GARAGE: 165m <sup>3</sup> YOGA ROOM: 28m <sup>3</sup> TOTAL: 193m <sup>3</sup>	193m <sup>3</sup> OF CUT TO BE REDISTRIBUTED AS FILL THROUGHOUT SITE
------------	--	--

**NOTE:** FOR SITE LANDSCAPING & PLANTING PLAN PLEASE REFER TO 02 LANDSCAPES DRAWING PACKAGE ATTACHED WITHIN THIS RESOURCE CONSENT.

FOR WASTEWATER & GEOTECHNICAL INFORMATION PLEASE REFER TO COOK COSTELLO REPORT ATTACHED WITHIN THIS RESOURCE CONSENT.

STEVEN  
LAWSON  
ARCHITECTS

STEVENS  
LAWSON  
ARCHITECTS  
LIMITED

TELEPHONE  
+64 9 377 5376

ADDRESS  
AXIS 1.1A  
1 CLEVELAND ROAD  
PARNELL  
AUCKLAND  
NEW ZEALAND

EMAIL  
MAIL@STEVENS.LAWSON.CO.NZ

PROJECT TITLE

TAUPŌ BAY  
JASON FRIEDLANDER, 1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND  
RESOURCE CONSENT

A RESOURCE CONSENT ISSUE			26/03/25
STATUS	NO	AMENDMENTS	DATE ISSUE
SHEET TITLE			DWG NO.
OVERALL SITE PLAN: PROPOSED			(1) 03
PROJECT ID	#Project ID	SCALE	SERIES OF
CAD FILE	0238_Taupō Bay	1:200	ISSUE / REV
DATE	1/04/25	@ A1	-A

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON THE SITE. DO NOT SCALE OFF DRAWINGS. COPYRIGHT RESERVED.





LEGAL DESCRIPTION

SITE ADDRESS: 1025 TAUPŌ BAY ROAD  
TAUPŌ BAY  
NORTHLAND 0494  
LOT NO.: 1  
DP: 567902  
TA: FAR NORTH DISTRICT COUNCIL  
DISTRICT PLAN ZONE: GENERAL COASTAL  
RESOURCE ZONE: OUTSTANDING LANDSCAPE  
WIND ZONE: VERY HIGH  
EARTHQUAKE ZONE: 1 (as per NZS3604:2011)  
EXPOSURE ZONE: D (as per NZS3604:2011)  
SURVEYED SITE AREA: 8.4275 HA

SURVEY INFORMATION

SURVEY INFORMATION HAS BEEN TRANSFERRED FROM  
SITE SURVEY (USING NZ VERTICAL DATUM) AS PREPARED  
BY WILLIAMS & KING REGISTERED LAND SURVEYORS,  
DATED 16 DECEMBER 2024.

0.2m CONTOURS OF SITE AREA

- SURVEY NOTES:**  
1. EXISTING LEVELS TO BE VERIFIED ON SITE PRIOR  
TO COMMENCEMENT OF CONSTRUCTION.  
2. GAS PIPES HAVE NOT BEEN INVESTIGATED AS  
PART OF THIS SURVEY.

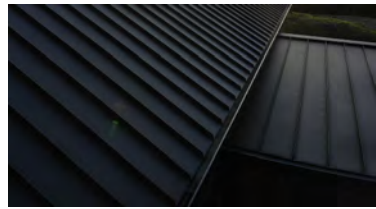




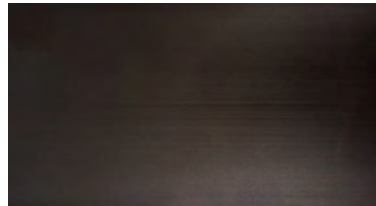
**CLADDING**  
HOUSE: VERTICAL BANDSAWN SHIPLAP  
VULCAN TIMBER, WALNUT  
LRV: 8 - 10%



**CLADDING**  
YOGA ROOM WALL & ROOF: UNCOATED  
VULCAN TIMBER SHINGLES, NATURAL  
LRV (INDICATIVE): 29%



**ROOF**  
HOUSE: STANDING SEAM LONG RUN  
PROFILE METAL ROOF, FLAXPOD MATTE  
LRV: 6%

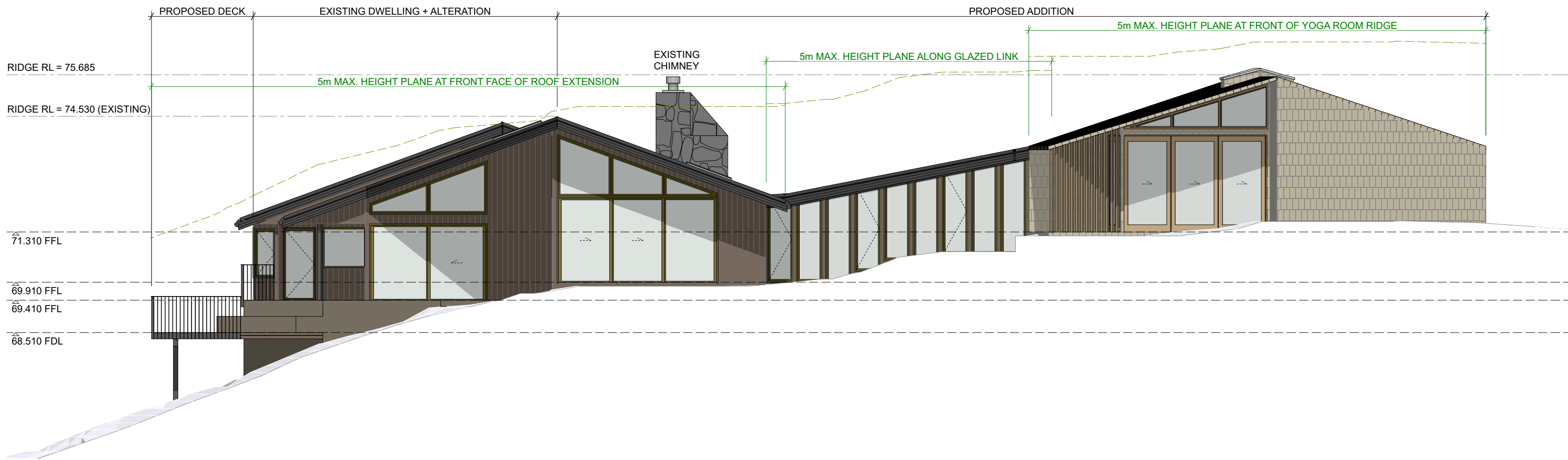


**JOINERY**  
HOUSE: ALUMINIUM JOINERY,  
MEDIUM BRONZE  
LRV: 7%

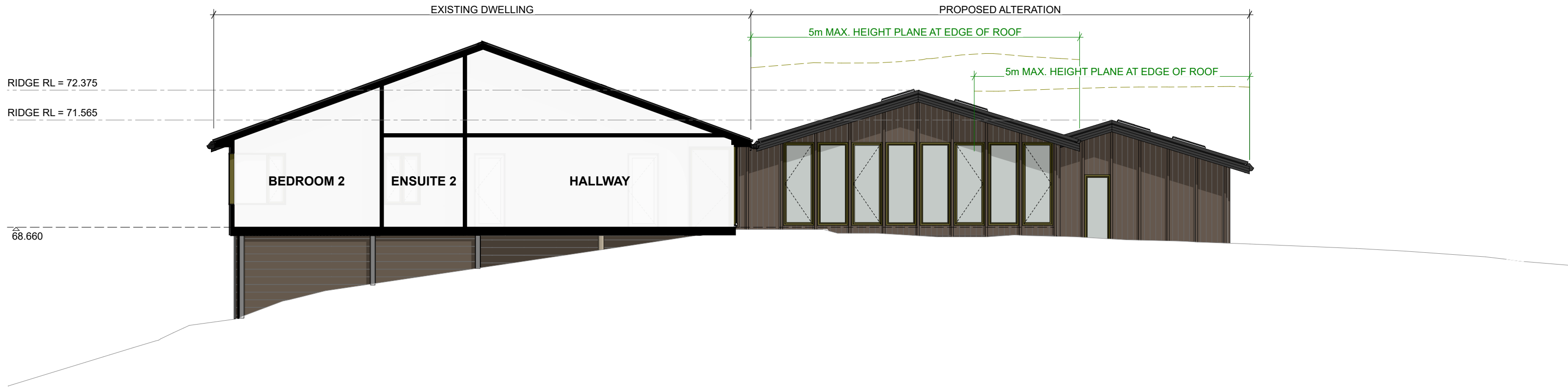


**JOINERY**  
YOGA ROOM: TIMBER JOINERY,  
NATURAL FINISH  
LRV: 15%

N NORTH ELEVATION



N1 NORTH INTERIOR ELEVATION



E EAST ELEVATION



STEVEN  
LAWSON  
ARCHITECTS

STEVENS  
LAWSON  
ARCHITECTS  
LIMITED

TELEPHONE  
+64 9 377 5376  
ADDRESS  
AXIS 1.1A  
1 CLEVELAND ROAD  
PARNELL  
AUCKLAND  
NEW ZEALAND  
EMAIL  
MAIL@STEVENS.LAWSON.CO.NZ

PROJECT TITLE

TAUPŌ BAY  
JASON FRIEDLANDER, 1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND  
RESOURCE CONSENT

A RESOURCE CONSENT ISSUE

26/03/25

STATUS	NO	AMENDMENTS	DATE ISSUE
SHEET TITLE			DWG NO.
PROPOSED ELEVATIONS: HOUSE			(2) 01
PROJECT ID	#Project ID	SCALE	SERIES OF
CAD FILE	0238_Taupō Bay	1:100	ISSUE / REV
DATE	1/04/25	@ A1	-A

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON THE SITE. DO NOT SCALE OFF DRAWINGS. COPYRIGHT RESERVED.

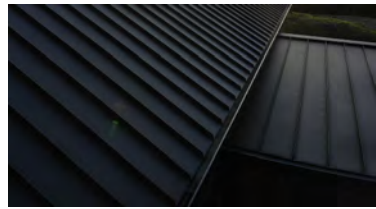




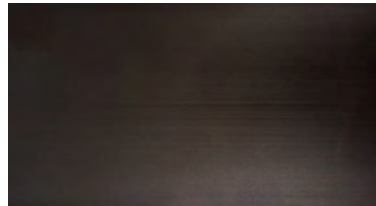
**CLADDING**  
HOUSE: VERTICAL BANDSAWN SHIPLAP  
VULCAN TIMBER, WALNUT  
LRV: 8 - 10%



**CLADDING**  
YOGA ROOM WALL & ROOF: UNCOATED  
VULCAN TIMBER SHINGLES, NATURAL  
LRV (INDICATIVE): 29%



**ROOF**  
HOUSE: STANDING SEAM LONG RUN  
PROFILE METAL ROOF, FLAXPOD MATTE  
LRV: 6%

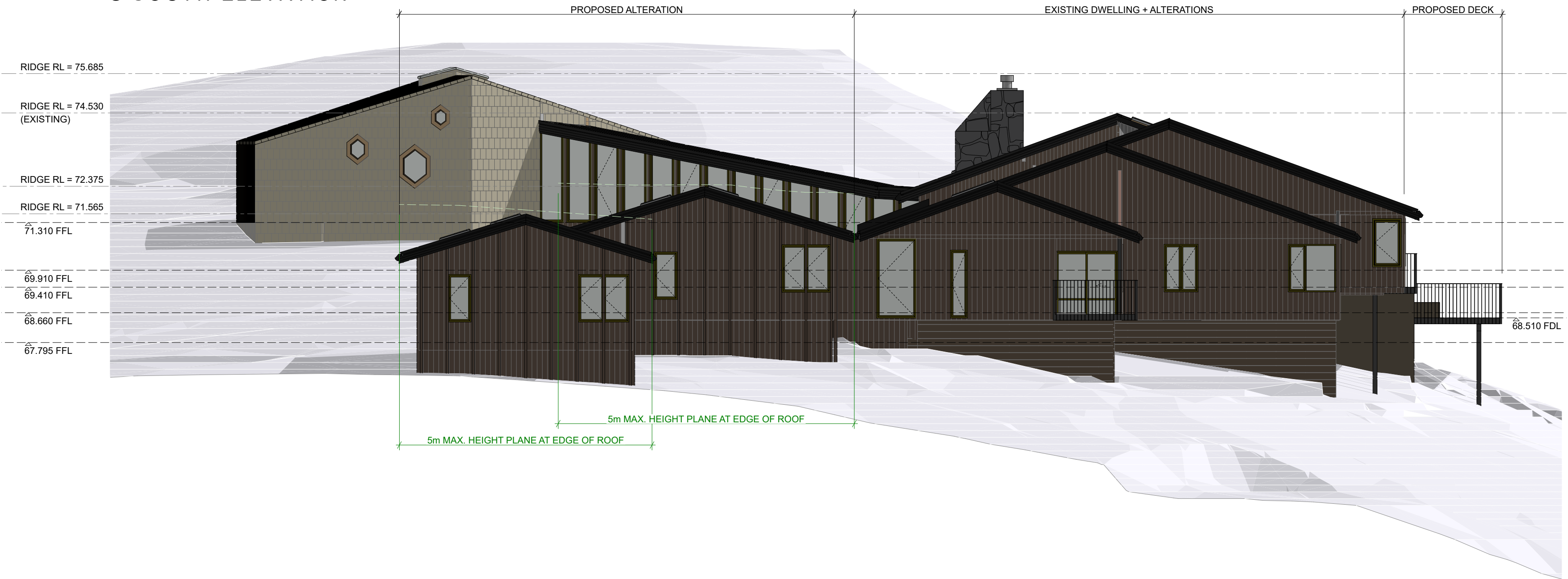


**JOINERY**  
HOUSE: ALUMINIUM JOINERY,  
MEDIUM BRONZE  
LRV: 7%

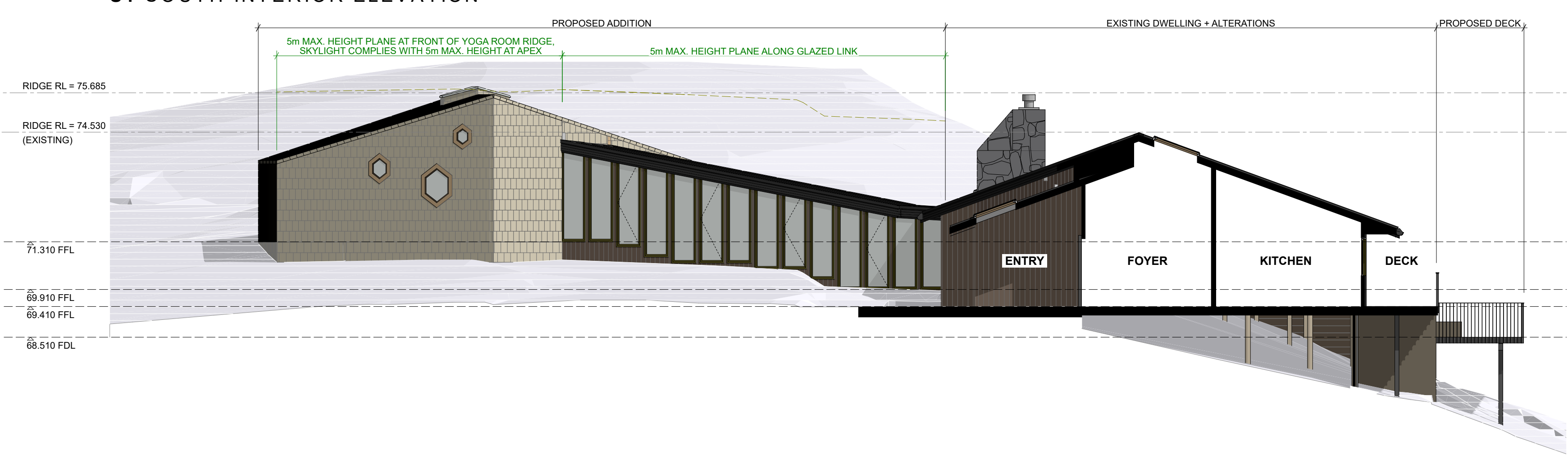


**JOINERY**  
YOGA ROOM: TIMBER JOINERY,  
NATURAL FINISH  
LRV: 15%

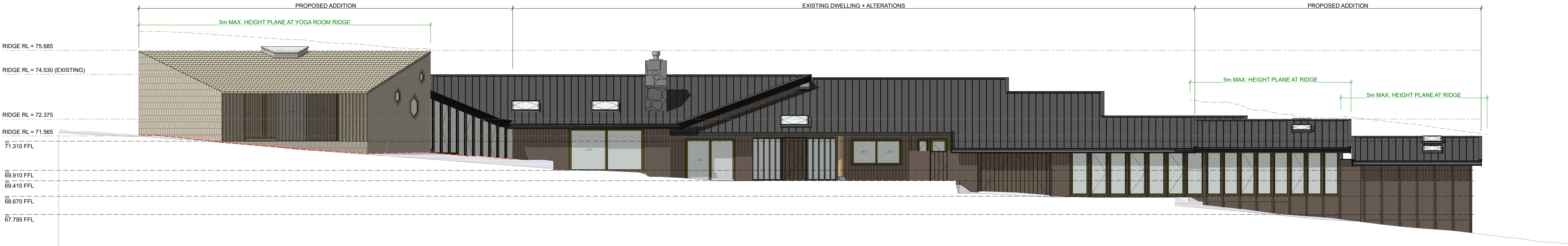
## S SOUTH ELEVATION



## S1 SOUTH INTERIOR ELEVATION



## W WEST ELEVATION



STEVEN  
LAWSON  
ARCHITECTS

STEVENS  
LAWSON  
ARCHITECTS  
LIMITED

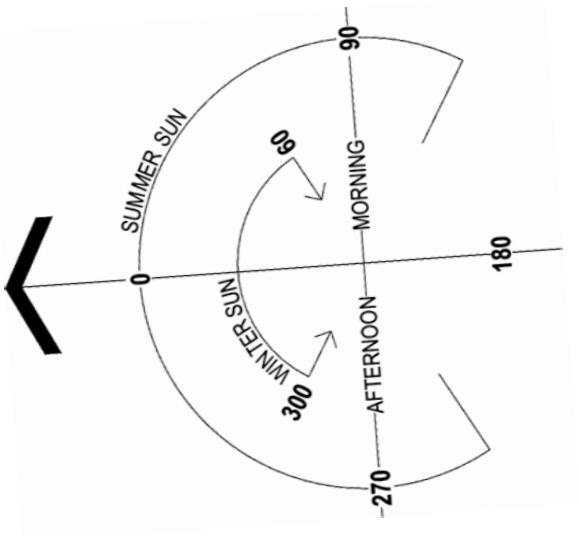
TELEPHONE  
+64 9 377 5376  
ADDRESS  
AXIS 1.1A  
1 CLEVELAND ROAD  
PARNELL  
AUCKLAND  
NEW ZEALAND  
EMAIL  
MAIL@STEVENS.LAWSON.CO.NZ

PROJECT TITLE  
TAUPŌ BAY  
JASON FRIEDLANDER, 1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND  
RESOURCE CONSENT

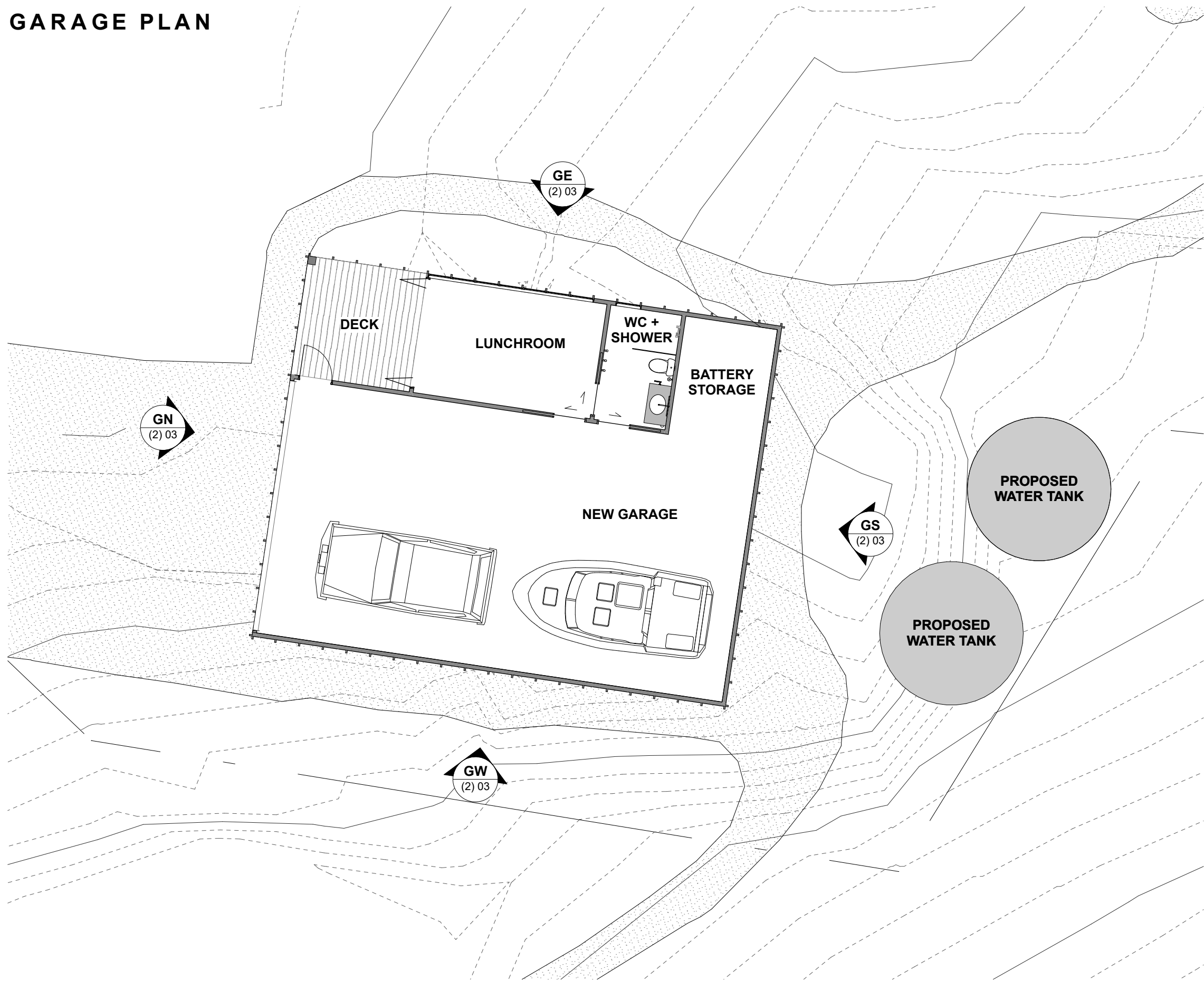
A RESOURCE CONSENT ISSUE			26/03/25
STATUS	NO	AMENDMENTS	DATE ISSUE
SHEET TITLE			DWG NO.
PROPOSED ELEVATIONS: HOUSE			(2) 02
PROJECT ID	#Project ID	SCALE	SERIES OF
CAD FILE	0238_Taupō Bay	1:100	ISSUE / REV
DATE	1/04/25	@ A1	-A

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON THE SITE. DO NOT SCALE OFF DRAWINGS. COPYRIGHT RESERVED.

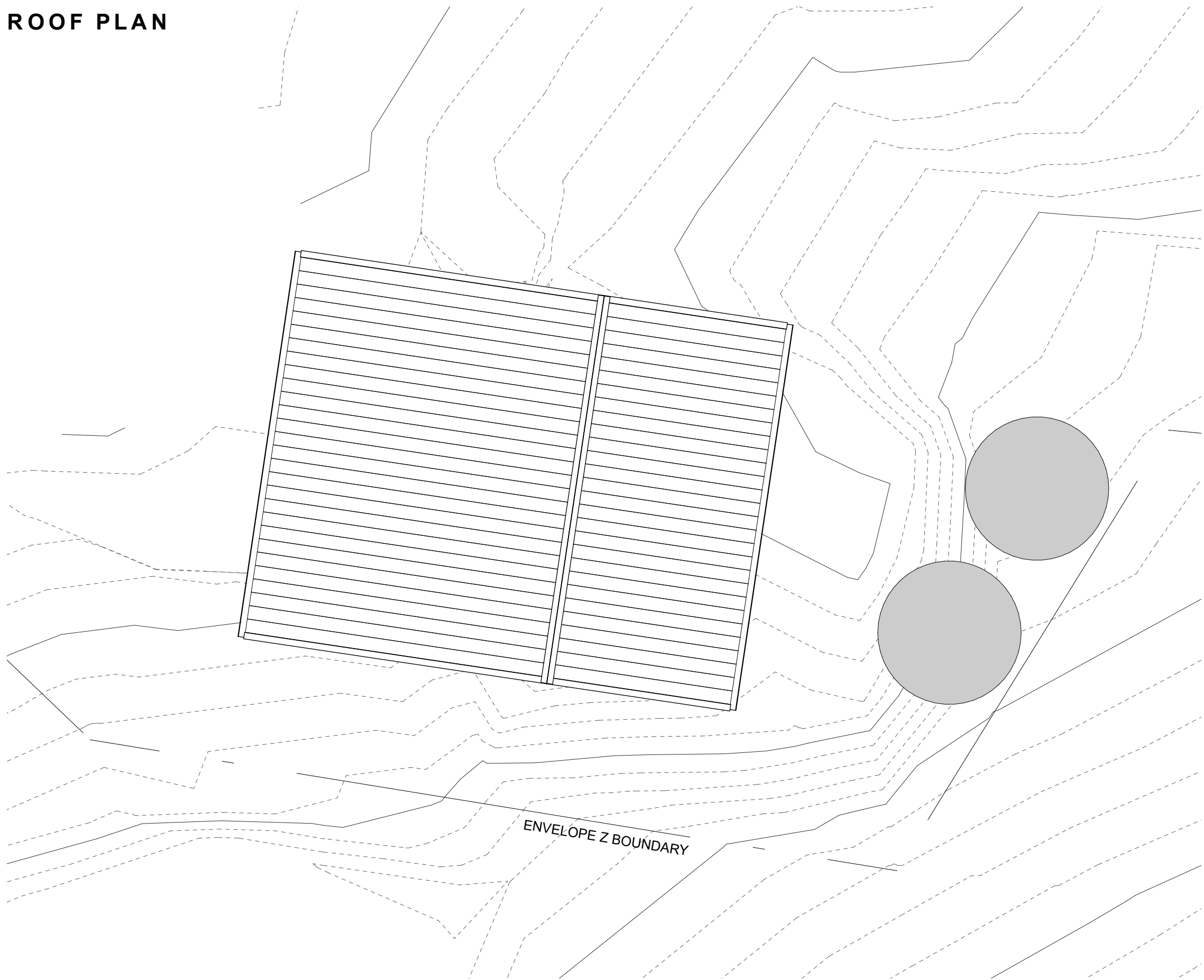




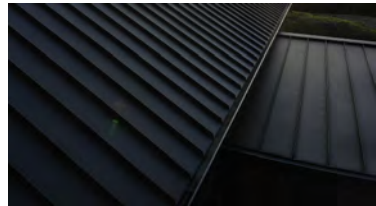
GARAGE PLAN



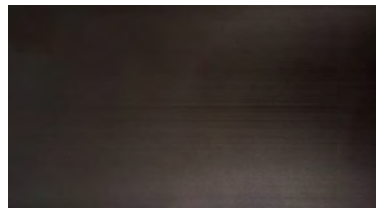
ROOF PLAN



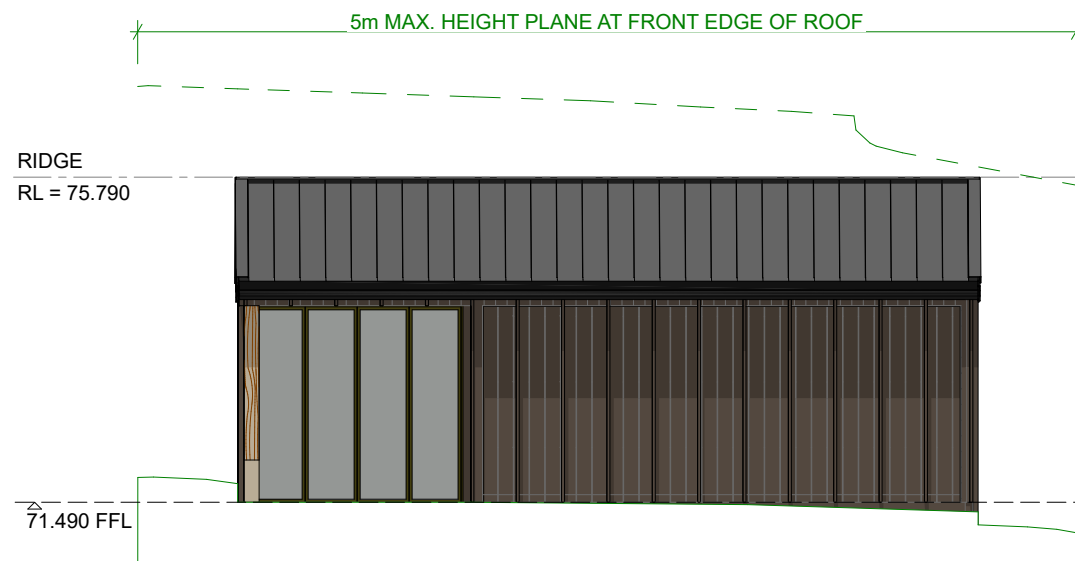
**CLADDING**  
VERTICAL BANDSAWN SHIPLAP  
VULCAN TIMBER, WALNUT  
LRV: 8 - 10%



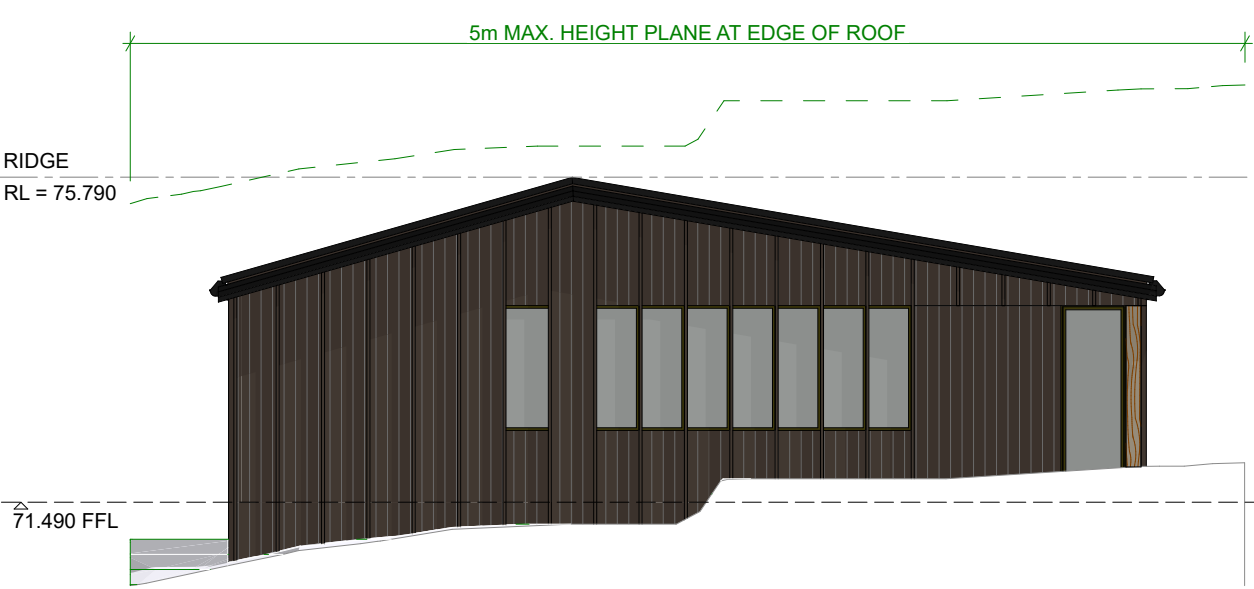
**ROOF**  
STANDING SEAM LONG RUN PROFILE  
METAL ROOF, FLAXPOD MATTE  
LRV: 6%



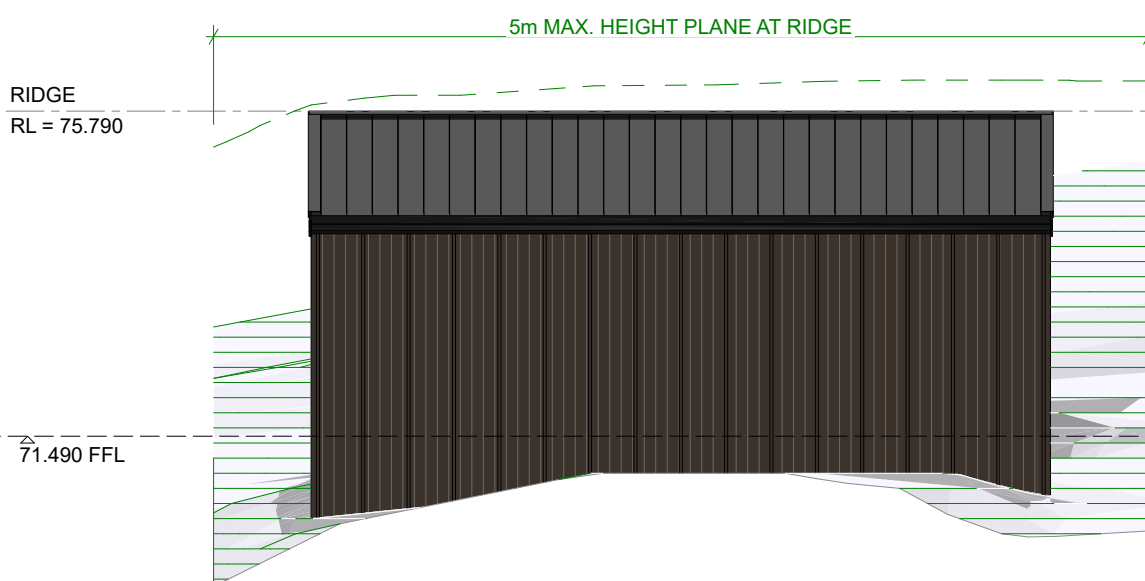
**JOINERY**  
ALUMINIUM JOINERY,  
MEDIUM BRONZE  
LRV: 7%



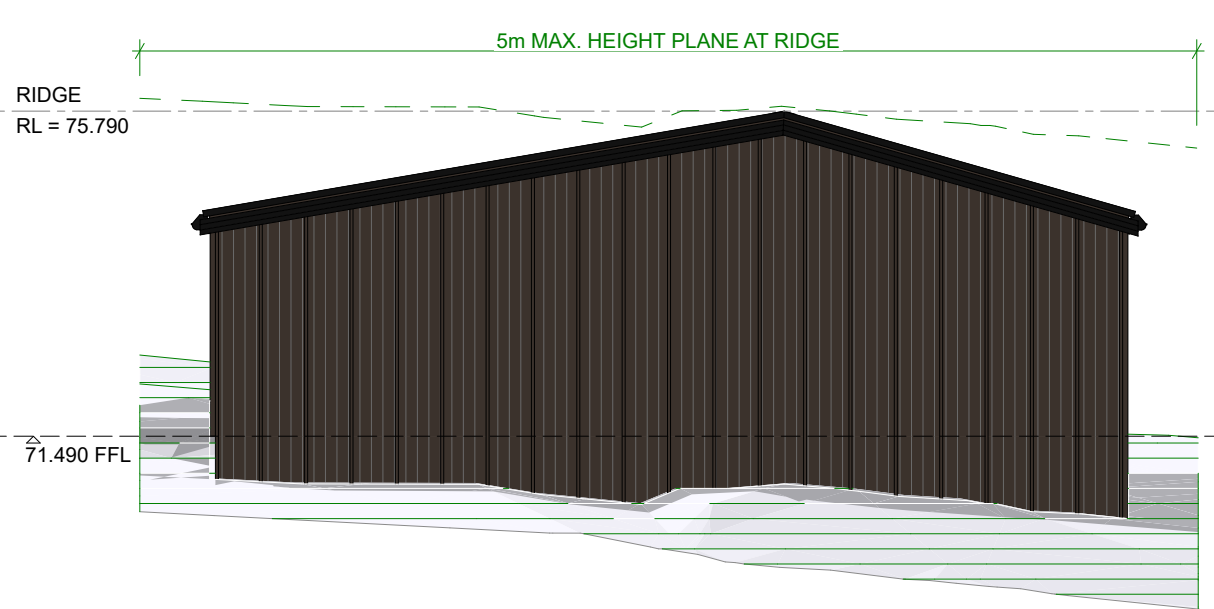
GN GARAGE NORTH ELEVATION



GE GARAGE EAST ELEVATION



GS GARAGE SOUTH ELEVATION



GW GARAGE WEST ELEVATION

STEVEN  
LAWSON  
ARCHITECT

STEVENS  
LAWSON  
ARCHITECTS  
LIMITED

TELEPHONE  
+64 9 377 5376  
ADDRESS  
AXIS 1.1A  
1 CLEVELAND ROAD  
PARNELL  
AUCKLAND  
NEW ZEALAND  
EMAIL  
MAIL@STEVENS.LAWSON.CO.NZ

PROJECT TITLE  
TAUPŌ BAY  
JASON FRIEDLANDER, 1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND  
RESOURCE CONSENT

A RESOURCE CONSENT ISSUE			26/03/25
STATUS	NO	AMENDMENTS	DATE ISSUE
SHEET TITLE			DWG NO.
PROPOSED ELEVATIONS: GARAGE			(2) 03
PROJECT ID	#Project ID	SCALE	SERIES OF
CAD FILE	0238_Taupō Bay	1:100	ISSUE / REV
DATE	1/04/25	@ A1	-A

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON THE SITE. DO NOT SCALE OFF DRAWINGS. COPYRIGHT RESERVED.

## **Memorandum to:**

Far North District Council Resource Consents Division

### **1025 TAUPO BAY ROAD – RESOURCE CONSENT APPLICATION FOR NEW BUILDINGS AND EXTENSION TO EXISTING HOUSE**

Landscape, rural character and visual amenity effects

We have been engaged by Mr J Friedlander to provide a review and input to inform a resource consent application for developments that he has planned for his property at 1025 Taupo Bay Road, being Lot 1 DP567902 (the Site).

This title was subdivided relatively recently under a resource consent granted to Waikopua Trustees Limited (2300052-RMASUB) (the RC). Littoralis Landscape Architecture provided a range of inputs to that consent, including an assessment of landscape, visual amenity and natural character effects<sup>1</sup>, a landscape integration concept, planting plans and a weed and pest management plan. It is intended that this memorandum be considered with reference to that earlier reporting and the related documents.

We also contributed to shaping some of the conditions that informed that consent, particularly those related to managing the visual, landscape and natural character effects of the proposal. We were involved in an earlier assessment in 2007, when the original owner of the home at the centre of this application, was considering options for the property. As a result of these periodic involvements in the property that span over almost 20 years, we have a longstanding understanding of the characteristics of the Site, its context and the original building.

We were also aware that the substantial, and very effectively integrated, lodge building that Mr Male constructed many decades ago was becoming somewhat dated and would be likely to undergo renovations and other works when it came into new hands. As a result, the conditions that we assisted to draft that found their way into the RC applied equally to the existing lodge building and to the vacant Lot 2 that was formed under the RC.

Immediately after being engaged to review and report upon the proposal, we undertook a site visit and field survey around the property. That fieldwork revisited the various vantagepoints that were

---

<sup>1</sup>*Proposed Subdivision by Waikopua Trust, Taupo Bay, Northland – Assessment of Landscape, Natural Character and Visual Effects* Littoralis Landscape Architecture May 2020

employed in our 2022 reporting cited below, which allowed us to view the various changes that have occurred in the past 24 months (which include the removal of a large belt of pines from along the ridge, the developing planting that we documented for the RC, and the construction of the house on Lot 2, which we reported upon in 2020. Photographs from that site visit are found in Attachment Two to this memorandum and inform the visual amenity effects commentary that lies near its end. Littoralis also prepared a volume of landscape guidelines, maintenance management and pest and weed control measures that were released in the following year.

### **Description of the proposal**

Mr Friedlander commissioned Stevens Lawson Architects (SLA) to modernise and extend the primary residence, to provide a yoga room adjoined to the house and to rationalise the free-standing buildings that exist on the title. In response, SLA have prepared the resource consent level design documentation for works that:

- Add two guest bedrooms to the southern end of the house
- Create a yoga room with a hexagonal footprint to the north west of the house, connected by a corridor designed to link that room into the house.
- Replace a pair of existing garages with a single new garage that incorporates a modest ancillary space and that is of a comparable size, volume, height and position to the existing structures (but with a considerably more recessive finish).
- Remove a small portable cabin that currently sits immediately to the west of the house.
- Realign the vehicle accessways to both the house and the garage, incorporating a low-key visitor parking area in the western lee of the house.
- Extensively replace or modify the cladding, joinery, decking/balustrades and other elements of the existing house.

A suite of drawings prepared by SLA form Attachment Four to this memorandum and these document the overall layout, form, materiality and finishes that are proposed.

Mr Friedlander also engaged o2 Landscapes through SLA to prepare a detailed landscape development concept that complements the revised layout of the house and aspirations to improve the setting of the house. We have provided some minor spatial input to that document and will review the appropriateness of that design approach and documentation near the end of this memorandum.

From the time of our initial contact with SLA and sighting of their preliminary drawings, it was very evident that their strategy for the property, and the philosophy of their client, was highly respectful of the characteristics and sensitivities of the site, the ethos of the existing lodge building, and the intentions of the consent conditions that seek to maintain the qualities of the setting (including the potential for wider visual amenity, natural character and landscape effects). Our engagement with o2 Landscapes has revealed a comparable level of awareness of the values and sensitivities of the Site.

## Assessment against the provisions of Conditions of Consent under 2300052-RMASUB

- (i) *The individual allotment may contain, at any one point in time, only one residential unit, garage, and water tanks, with no ancillary structures.*

Comment: The proposal acknowledges these parameters, with the two additional bedrooms being an extension to the stepped format of the southern end of the existing lodge, and the proposed yoga room being joined to the house by a glazed corridor which adopts the nomenclature of the joinery on the eastern face of the house (as seen by comparing the S1 - South Interior Elevation and W – West Elevation) on SLA drawing no. (2)02. A singular garage building would replace the two garages that currently exist.

- (ii) *All new buildings, garages and water tanks, are to be erected within the building envelopes as shown on survey plan DP502402 as required by Condition 2(b) without the prior approval of Council.*

Comment: All buildings have been positioned within the defined building envelope for Lot 1.

- (iii) *All new buildings shall be designed and oriented to run along the contour of the landform, so that the structures are more effectively integrated with the topography.*

Comment: The bedroom extensions to the house run south and slightly down the contour, relating well to the slightly dropping terrain on that part of the site. Whilst the floor level of the yoga room lies above that of the main body of the house, the roof profile of that part of the proposal represents a modest step up to the north, echoing comparable stepping in the modules of roof form that project south. A similarly scaled step occurs between existing (and proposed) bedrooms 1 and 2. The eastern elevation seen at the base of SLA drawing no (2) 01 illustrates how the proposed building would gently traverse along the contour, as anticipated by this condition.

- (iv) *All buildings shall be finished in natural material that will weather to a dark hue such as timber and dark stone or in colours which have a reflectance value of not more than 30% for roofing and roof fascias and not more than 35% for building facades. These reflectance values shall also apply to powder coated or anodised finishes applied to aluminium joinery. A schedule of colours/materials are to be submitted in conjunction with any Building Consent application for the approval of Council.*

Comment: Building finishes are annotated on the left side of the elevations shown on SLA drawings (2) 01, (2) 02, and (2) 03 demonstrate that none of the exterior finishes would have an LRV that is no greater than 15% and therefore considerably less than the 30/35% limits stipulated by this condition. It should be noted that the reflectance values of the timber shingles specified for the yoga room would initially have a higher LRV as raw timber, but that these will rapidly weather (particularly in the exposure of this site) to the darker shade adopted by the SLA elevation rendering. The requirement in the drawings that these be left uncoated will allow that natural process of weathering to occur. The two raw galvanised garages on the site would be replaced with a new building finished in materials with an LRV of no more than 10%.

- (v) *All buildings shall be designed so that either:*

- i. *The rooflines are irregular and stepped, with the plan of the dwelling being broken up or indented. This will allow for trees close to the dwelling, create shadows and reduce the appearance of scale; or*
- ii. *The buildings have a simple, rectangular or square form, a flat roof and eaves not less than 2.400m in depth to eastern and northern elevations to provide shade to building facades in most light conditions. The roof-edge fascia to these elevations shall not exceed 200mm in depth.*

Comment: The bedroom extensions have adopted the format of the existing house, incorporating the roof profiles, ridgeline steps and eaves of the balance of the building, which has previously been acknowledged in our reporting as an example of a very well-integrated structure. That rhythm of form is well illustrated by the south elevation seen to top right of drawing (2) 02. Whilst the proposed yoga room wing would bring a materiality that departs from that of the core of the building, it incorporates some of the “language” of the existing lodge. Measures include picking up on the angled margins to the roof plane that are a feature of that existing building, the scale and format of window joinery, the horizontal roof ridge mentioned previously and use of timber as a cladding (albeit in a different, shingled, format. Of particular importance is the way that the roof of the yoga room would overlay the eastern face of that part of the overall structure to create the shadowing seen on the top and bottom elevations of drawing no. (2) 01.

Collectively, these measures very effectively capture the spirit and intended outcome of approach i. of Condition (vi).

- (vi) *Parking and utility areas shall be screened, and all cut and fill batters or retaining walls are to be revegetated within the first planting season.*

Comment: Provision for car parking is positioned close to the western lee of the building, where the planting proposed by the o2 Landscapes documentation would rapidly create a containing screen.

- (vii) *All new accessways shall be constructed so that their surfaces are finished with a visually recessive materials such as dark gravel, hotmix or chipseal, or concrete with a dark oxide additive.*

Comment: Parking areas and accessways are all proposed to be finished in dark gravel. It is noteworthy that the extent of surfacing is to be reduced from the current level, contributing to improved infiltration and lesser discharge of stormwater.

- (viii) *All new services, including power and phone connections, shall be installed underground.*

Comment: All services would remain underground.

Whilst the preparation of detailed landscape documentation was not a requirement of the consent notice that applies to Lot 1, o2 Landscapes were engaged to prepare comprehensive documentation that has sought to optimally integrate the house within its immediate setting and to address functional requirements such as revised carparking and vehicular access.

These drawings and related notes are contained in a volume entitled *1025 Taupo Bay Road 03 – 2025 Landscape Layout – Resource Consent*, which are found in Attachment Five to this memorandum.

Key aspects of the design contained in this package of documentation are:

- Building vegetation patterns out from earlier planting installed as part of the subdivision consent to broaden and better integrate those initially linear arrangements of vegetation.
- Infilling of the current void between the native forest that clads the coastal flank to the east of the existing house and that building.
- Reconfiguring a belt of established pohutukawa that line the existing driveway (which is intended to be largely decommissioned in the area near the house/garage), so that several of the largest specimens are strategically repositioned as backdrop elements whilst also creating a more natural overall format. That reconfiguration will open small gaps between the rearranged trees relative to their existing, closely planted centres but will also provide the space for those specimens to achieve a spreading and dense canopy once separated from the intense competition that currently afflicts them.
- Generally developing a considerably more vegetated setting to the house and garage area, including greater body to the backdrop to the west of the building.
- Restoration of the slope that drops from the ridge within the site down to Taupo Bay Road. This former pasture is already in a process of colonisation by a range of indigenous species (as is evident in Panorama VP09 in Attachment Three).

Our scrutiny of the material prepared by O2 Landscapes and contained in Attachment Five, confirms that this appropriately and comprehensively achieved the objectives of optimising the integration of the reconfigured building and the applicant's desire to considerably soften the rather structured exterior elements that currently exist. In this regard, we note that the positioning of the building extensions has been configured to avoid any removal of naturally occurring indigenous vegetation.

## **Effects commentary**

### ***Visual amenity effects***

The panoramic photographs contained in Attachment Two replicate the representative vantage points adopted by our earlier assessment reporting on the subdivision of the site. Comparison with those earlier images will reveal the changes that have occurred within the site during the intervening period, most particularly the removal of the large pines that previously lined the ridge to the west of the existing house and the continued growth and colonisation of the vegetation in the area associated with the existing house. These images reinforce the successful way in which the current building relates to its setting, largely because of its position relative to the forested eastern foreground, the horizontal, stepped form of the structure and the dark finishes that clothe the building.

The viewing audiences potentially affected can be grouped into four categories:

#### Those entering the settlement along Taupo Bay Road

Panoramas VP09 and VP11 show the two primary views descending towards sea level. The latter captures the glimpse to the site as part of a much wider view. Over this distance, and considering the moving nature of the viewing audience, the current buildings are barely discernible in this outlook and the proposal to replace the garages with a darker finished building will serve to lessen existing, nominal, effects.



Panorama VP09 illustrates that none of the existing or proposed built development can/would be seen from this lower portion of Taupo Bay Road. The grassed flank that occupies much of this view would be revegetated under the proposal.

#### Users and residents of Bowden Road

This small local cul-de-sac lies immediately inland of the site and is moderately elevated relative to the site. It should be noted that those that live on Bowden Road are a “static” audience who experience views to the east (and the Site) as a regular part of their daily lives. Part of the road, as seen in VP10 is oriented towards the Site as descends towards the valley.

It is noteworthy that the pale, galvanised garages set upon the ridge the most visible of the existing buildings despite their modest size. The replacement of those garages and the very muted nature of the proposed built modifications would result in the buildings having a lesser presence than is currently experienced.

The main house is predominantly screened by the row of pohutukawa lining the upper drive and that screening would be perpetuated under the proposed rearrangement of those trees, including the intention to create a western backdrop to the yoga room with one of the larger specimens.

The growth of earlier planting installed as part of the subdivision process – which is evident in this image - will combine with the comprehensive vegetation documented by o2 Landscapes to entirely screen all the buildings proposed on the site from this viewing audience well within 5 years and create a progressive buffering in the interim.

#### Southern end of beach and related area of settlement

Panoramas VP07 and VP08 represent views to the Site from this southern sector of the settlement and beach. Over this extended distance and angle of view, the existing lodge building is barely visible, a testimony to its positioning, form and recessive finishes. Interestingly, it is the narrow belt of grass lying between the existing building and the inland edge of the adjoining coastal flank forest that is most conspicuous. The o2 documentation provides to plant that grassed area with indigenous species, which will unify its appearance with the forest to remove that contrasting belt.

Whilst occupying a larger footprint, the proposed modifications and extensions to the building would see the entire new structure being still less commanding than the existing building. The yoga room and its connecting corridor would lie almost entirely in the lee of the main body of the house in these southern views, whilst the added bedrooms would be concealed by taller forest to the immediate south of the house.

#### Mid beach area

Whilst much closer to the Site than preceding VP07, this representative view illustrates the role of the coastal forest on the coastal flank of the Site in largely blocking the sightline to the house, as the view up across that vegetation becomes nearer and steeper. A tiny glimpse of the previously mentioned grassed eastern foreground to the house acts as a minor flag but is much less prominent than it is from further down the beach. Once again, modifications to the fabric of the house as it exists will make it still less prominent and the extensions to the building will not be perceptible in this or closer views.

As such, the proposal will lessen the visual effects of the building in these types of views, relative to the already subdued presence of the house in its current state.

#### Inner coastal marine area

A range of panoramas traverse the waters of the inner to mid bay form, as seen in Attachment One. These are intended to provide a representation of the sorts of views that people in boats would experience when looking landward from various maritime tracking lines to the north, due east, and south toward the mouth of Whangaroa Harbour.

VP03 and VP04 are set approximately 400-500m offshore, shadowing VP06 and VP07 on the beach. In VP04 the Site is largely backdropped by more elevated, bush-clad terrain further to the north. The existing house is difficult to distinguish and so has almost no visual amenity effect. Even without the benefit of that distant backdrop, the house remains subdued in VP03, despite being set against the skyline in this closer and steeper view up towards the Site.

As previously outlined, the proposal will broadly further lessen the presence of the existing part of the intended building. From this angle, the added bedroom wing would largely be obscured by bush close to the southern end of the existing house and by the fact that it would be pushed inland relative to the seaward face of the house. The yoga room wing would be perceived as an incremental advance to the north of the current house but intended planting and eastward repositioning of several of the existing pohutukawa (just seen on the skyline when zoomed into this image) would bring a useful vegetative context to that extension. The raw shingle cladding of the yoga room would initially give it some prominence, but that contrast would rapidly diminish as the cladding naturally weathers to a grey hue over a period of 12-24 months, at which point the combination of that subdued finish and developing planting would see the yoga room join the rest of the house in having a very muted presence in its immediate and broader setting.

From the position of VP02 in the northern hook of the bay, semi mature pohutukawa on the intervening coastal flank almost entirely obscure visibility to the house as it stands, and that circumstance would remain unchanged by the proposal.

Panorama VP01 represents the views of people in small craft tracking the shore or those returning to the primary boat launch and retrieval area at this northern end of the beach. In this steep viewing angle up to the Site, the existing house is “sky lined” at the crest of the coastal flank, but its potential dominance is much subdued by the building’s finishes and the softening effect of the vegetation on the flank below. In this view, the bedroom wing will be pressed back inland and out of this viewshaft. Although the terrain underlying the proposed yoga room is at a slightly greater elevation than the house, the displacement of that northern wing well to the west would also push it out of visibility from this point.

As a passing observation, the covenanted vegetation seen to seaward of the house is of modest age and will be continuing to grow at some pace, albeit reined in by its coastal exposure. Height increases of 300-500mm per annum are a conservative estimate, indicating the seaward foreground to the existing – and proposed expanded building – will strengthen its mitigating role over coming years.

In summarising the potential adverse visual amenity effects addressed by the preceding commentary, these range from being modestly positive through to marginally adverse, but well below a level of

*minor.* With the benefit of 3-5 years of vegetative growth and weathering of the yoga room shingles, the proposal will represent a net reduction of visual effects from the status quo, which is already at a very limited level of impact.

### ***Landscape and natural character effects***

The landscape effects of a building development that complies with the conditions and guidelines that apply to the Site were assessed by our 2020 reporting as being initially less than minor and ultimately insignificant. The proposal has embraced the parameters and principles conveyed by the relevant conditions and guidelines in a sensitive and fulsome manner, so our 2020 predictions can be confidently reinforced by this memorandum.

### **Summary**

In conclusion, it is our assessment that the application has proactively responded to the principles arising from our earlier contribution to 2300052-RMASUB and that it satisfies all the conditions contained in that consent that fall within our area of expertise. Potential adverse effects upon visual amenity, natural character and landscape values would be nominal and less than minor.

Mike Farrow Principal Landscape Architect

LITTORALIS LANDSCAPE ARCHITECTURE

April 2025

# ATTACHMENTS

---

RESOURCE CONSENT  
1025 TAUPŌ BAY ROAD | TAUPŌ BAY

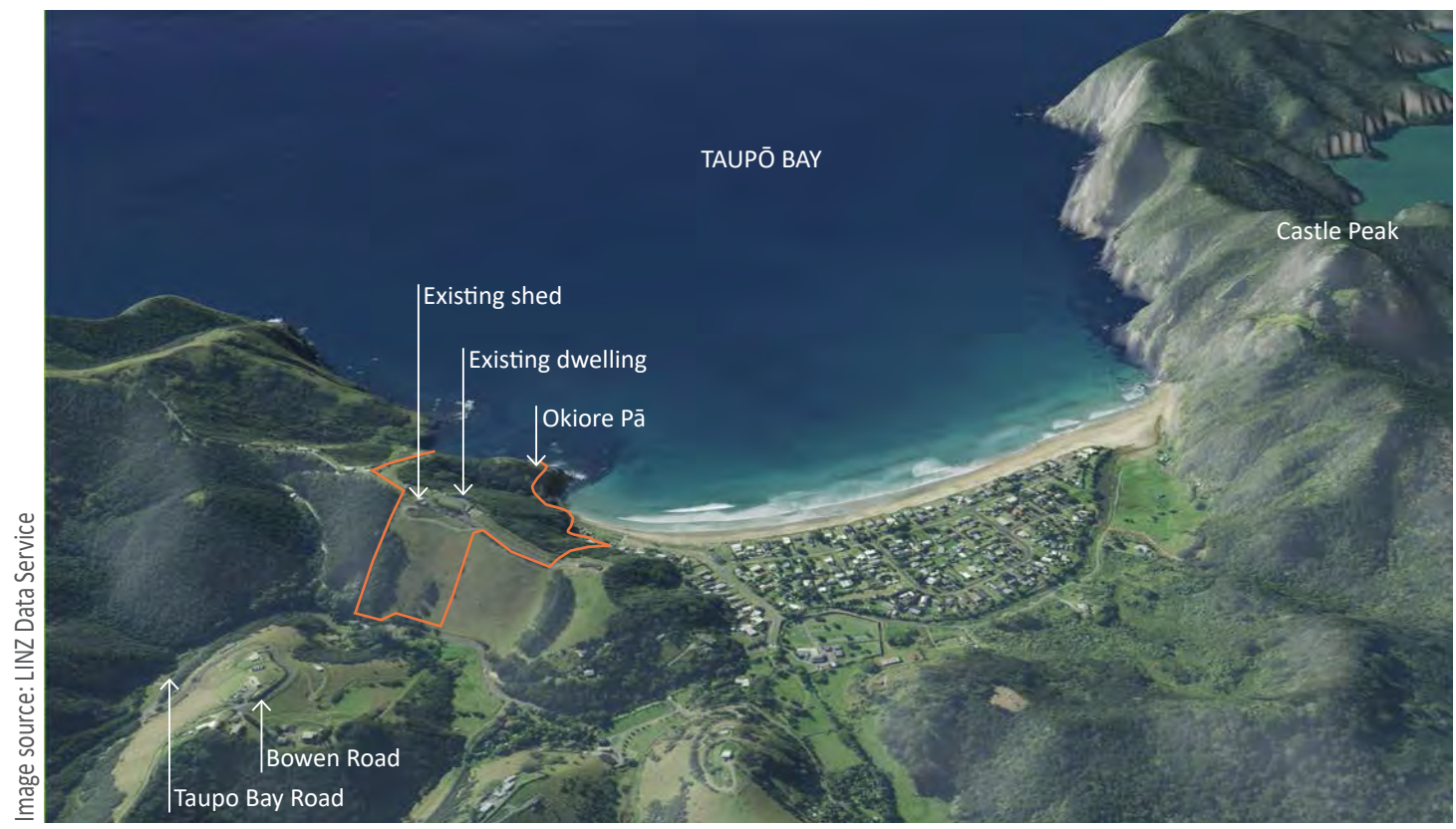


# ATTACHMENT ONE

## OBLIQUE AERIAL VIEWS



| OBLIQUE VIEW 1



| OBLIQUE VIEW 2



ATTACHMENT TWO  
VANTAGE POINT LOCATIONS





ATTACHMENT THREE  
SITE PHOTOGRAPHS

Date of photography for panoramas  
30/01/2025 01:00pm to 4:15pm

The panoramic photographs were digitally merged. Original photographs with Nikon D3300 with approx. 33mm focal length lens setting, making the image magnification equivalent to a 50mm focal length lens on a full frame 35mm camera. The field of view for each panorama varies in response to the relevant field of view for each of the vantage points.



**Panorama VP01:**  
Looking up towards the Site from near the rocky shelf that forms the northern end of Taupo Bay beach just after mid-tide outgoing.  
The mark on this and the following panoramas indicates the location of the proposed yoga room.



**Panorama VP02:**  
This panorama is taken near the northern point of the crescent shaped bay, approx. 850 m from the beach. The arrow indicates the location of the existing dwelling, which is screen by mature vegetation.



ATTACHMENT THREE  
SITE PHOTOGRAPHS



**Panorama VP03:**  
This view is taken approx.750m off-shore out from the Pōhutukawa Reserve.



**Panorama VP04:**  
This panorama is taken towards the southern end of the beach, approx.. 450m off-shore from the river mouth.



ATTACHMENT THREE  
SITE PHOTOGRAPHS



**Panorama VP05:**  
This vantage point also aligns with the Pōhutukawa Reserve, but is situated closer to the beach that VP03.



**Panorama VP06:**  
Looking up towards the Site from the beach below the Pōhutukawa Reserve.



ATTACHMENT THREE  
SITE PHOTOGRAPHS



**Panorama VP07:**  
This panorama is taken between the public carpark at the southern end of the beach and the high tide mark.



**Panorama VP08:**  
View from Marlin Drive/ Mako Street intersection.



# ATTACHMENT THREE

## SITE PHOTOGRAPHS



**Panorama VP09:**  
View of the southern flank of the Site as seen from Taupo Bay Road.



**Panorama VP10:**  
Looking east towards the Site from the Bowden Road that provides access to several dwellings. The existing dwelling is largely screened by the row of existing pohutukawa. Over time the belt of existing revegetation planting along the upper driveway will combine with the proposed planting to provide screening from this vantage point.



ATTACHMENT THREE  
SITE PHOTOGRAPHS



**Panorama VP011:**  
View from Taupo Bay Road, approximately 250m from the top of the ridge. From this vantage point the existing house is hardly discernable behind the row of existing pohutukawa.

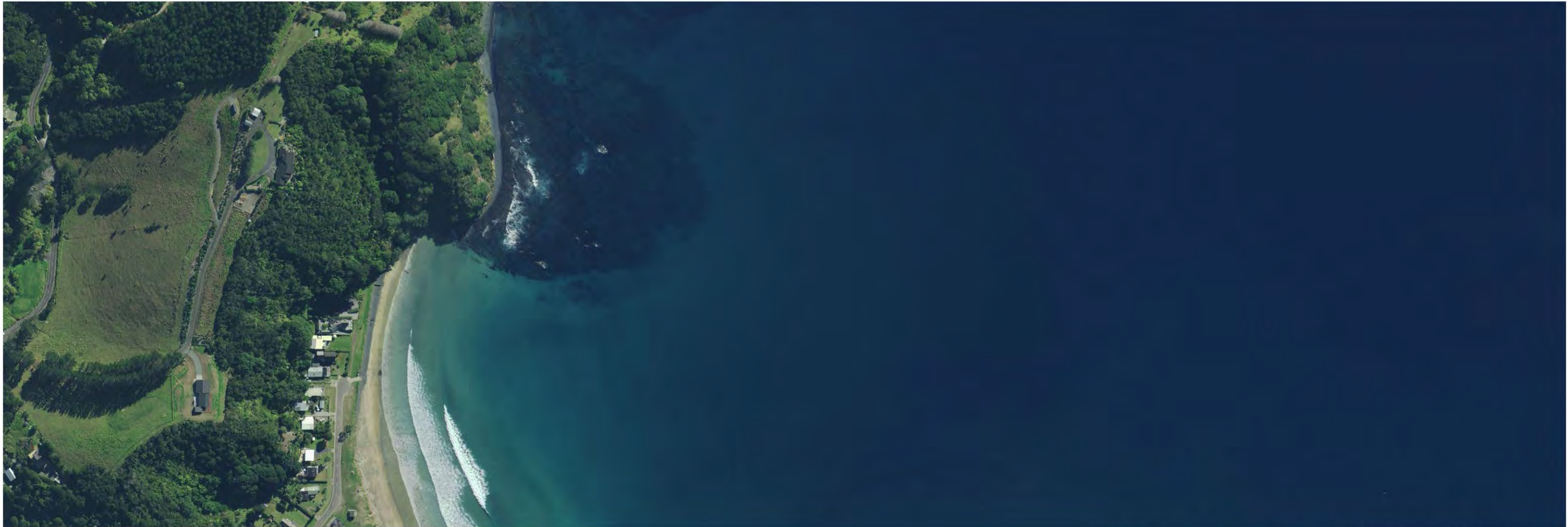
# ATTACHMENT FOUR

---

ARCHITECTURAL PLANS BY  
STEVENS LAWSON ARCHITECTS LTD



RESOURCE CONSENT



TAUPŌ BAY HOUSE ALTERATIONS

1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND

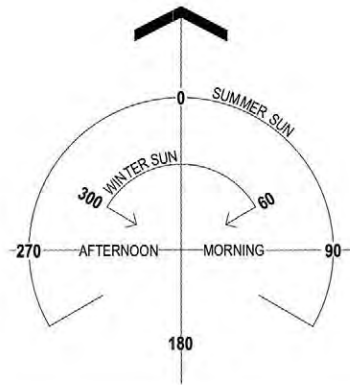
STEVEN  
SON  
LAW  
ARCHITECTS

DRAWING SCHEDULE	
1 (01)	SURVEY PLAN: EXISTING
1 (02)	EXISTING & DEMOLITION PLAN
1 (03)	SITE PLAN: PROPOSED
1 (04)	GROUND FLOOR PLAN: PROPOSED
2 (01)	PROPOSED ELEVATIONS: HOUSE
2 (02)	PROPOSED ELEVATIONS: HOUSE
2 (03)	PROPOSED ELEVATIONS: GARAGE





LOCATION PLAN (NOT TO SCALE)



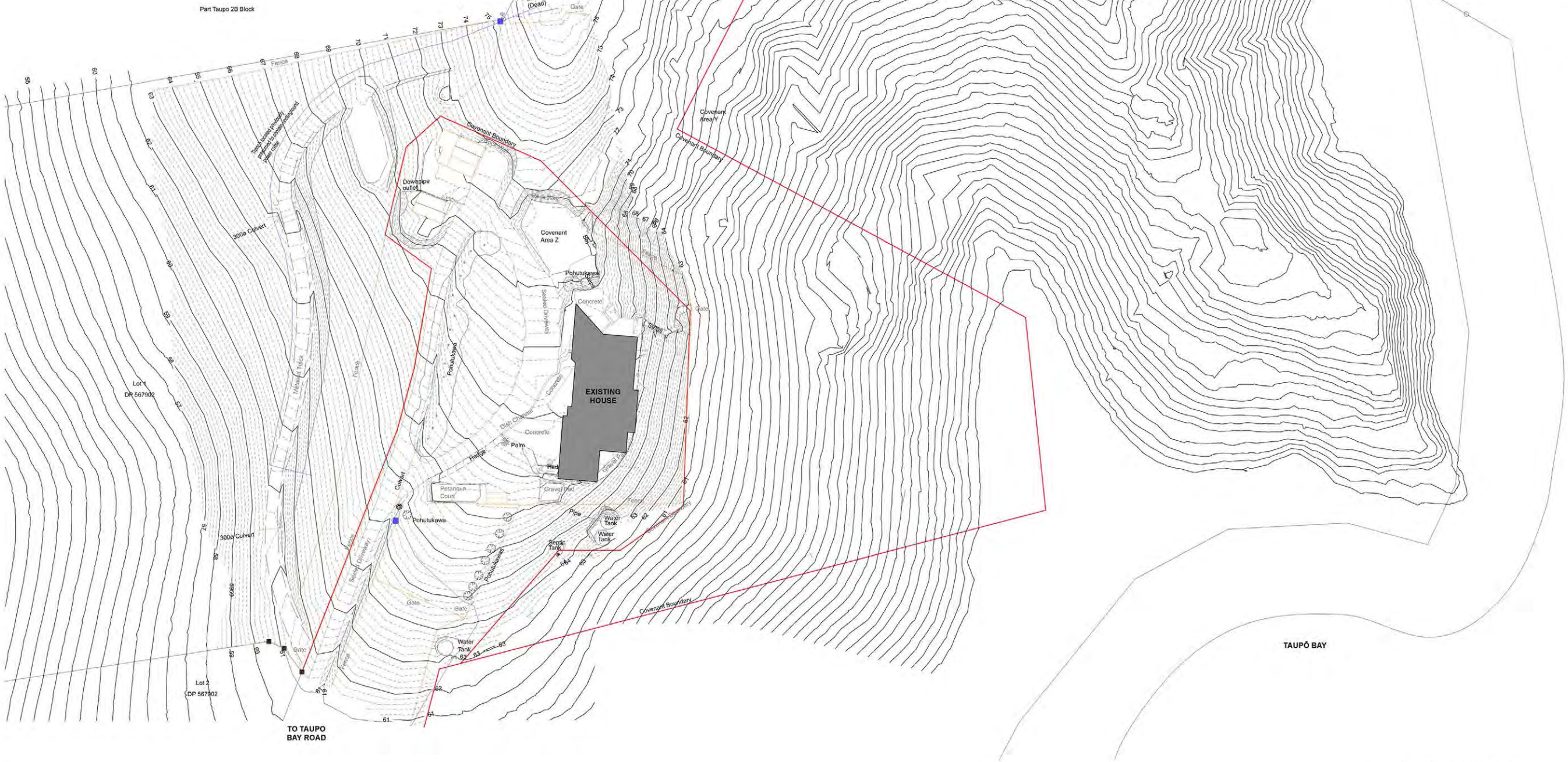
#### LEGAL DESCRIPTION

SITE ADDRESS: 1025 TAUPŌ BAY ROAD  
TAUPŌ BAY, NORTHLAND 0494  
LOT NO.: 1  
DP: 567902  
TA: FAR NORTH DISTRICT COUNCIL  
DISTRICT PLAN ZONE: GENERAL COASTAL  
RESOURCE ZONE: OUTSTANDING LANDSCAPE  
WIND ZONE: VERY HIGH  
EARTHQUAKE ZONE: 1 (as per NZS3604:2011)  
EXPOSURE ZONE: D (as per NZS3604:2011)  
SURVEYED SITE AREA: 8.4275 HA

#### SURVEY INFORMATION

SURVEY INFORMATION HAS BEEN TRANSFERRED FROM SITE SURVEY (USING NZ VERTICAL DATUM) AS PREPARED BY WILLIAMS & KING REGISTERED LAND SURVEYORS, DATED 16 DECEMBER 2024, ACCOMPANIED BY 2016 LDMR INFORMATION OF SITE SURROUNDS.

- SURVEY NOTES:**
- EXISTING LEVELS SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.
  - GAS PIPES HAVE NOT BEEN INVESTIGATED AS PART OF THIS SURVEY.



STEVEN  
LAWSON  
ARCHITECT

STEVEN  
LAWSON  
ARCHITECTS  
LIMITED

TELEPHONE  
+64 9 377 5376  
ADDRESS  
AXIS 1.1A  
1 CLEVELAND ROAD  
PARNELL  
AUCKLAND  
NEW ZEALAND  
EMAIL  
MAIL@STEVENS.LAWSON.CO.NZ

#### PROJECT TITLE

TAUPŌ BAY  
JASON FRIEDLANDER, 1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND  
RESOURCE CONSENT

A RESOURCE CONSENT ISSUE

28/03/25

STATUS	NO	AMENOMENTS	DATE ISSUE
SHEET TITLE			DWG NO.
SURVEY PLAN: EXISTING			(1) 01
PROJECT ID	#Project ID	SCALE	SERIES OF
CAD FILE	0238_Taupō Bay	1:500	ISSUE / REV
DATE	1/04/25	@ A1	-A

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON THE SITE. DO NOT SCALE OFF DRAWINGS. COPYRIGHT RESERVED





#### LEGAL DESCRIPTION

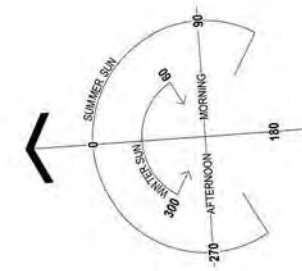
SITE ADDRESS: 1025 TAUPŌ BAY ROAD  
TAUPŌ BAY, NORTHLAND 0494  
LOT NO.: 1  
DP: 567992  
TA: FAR NORTH DISTRICT COUNCIL  
DISTRICT PLAN ZONE: GENERAL COASTAL  
RESOURCE ZONE: OUTSTANDING LANDSCAPE  
WIND ZONE: VERY HIGH  
EARTHQUAKE ZONE: 1 (as per NZS3604:2011)  
EXPOSURE ZONE: D (as per NZS3604:2011)  
SURVEYED SITE AREA: 9.4275 HA

#### SURVEY INFORMATION

SURVEY INFORMATION HAS BEEN TRANSFERRED FROM SITE SURVEY (USING NZ VERTICAL DATUM) AS PREPARED BY WILLIAMS & KING REGISTERED LAND SURVEYORS, DATED 16 DECEMBER 2024, ACCOMPANIED BY 2016 LIDAR INFORMATION OF SITE SURROUNDS.

- SURVEY NOTES:**
- EXISTING LEVELS SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.
  - GAS PIPES HAVE NOT BEEN INVESTIGATED AS PART OF THIS SURVEY.





LEGAL DESCRIPTION	
SITE ADDRESS:	1025 TAUPŌ BAY ROAD TAUPŌ BAY NORTHLAND 0494
LOT NO.:	1
DP:	567002
TA:	FAR NORTH DISTRICT COUNCIL
DISTRICT PLAN ZONE:	GENERAL COASTAL
RESOURCE ZONE:	OUTSTANDING LANDSCAPE
WIND ZONE:	VERY HIGH
EARTHQUAKE ZONE:	1 (as per NZS3604:2011)
EXPOSURE ZONE:	D (as per NZS3604:2011)
SURVEYED SITE AREA:	9.4275 HA

SURVEY INFORMATION	
SURVEY INFORMATION HAS BEEN TRANSFERRED FROM SITE SURVEY (USING NZ VERTICAL DATUM) AS PREPARED BY WILLIAMS & KING REGISTERED LAND SURVEYORS, DATED 16 DECEMBER 2024.	
0.2m CONTOURS OF SITE AREA	
SURVEY NOTES:	
1.	EXISTING LEVELS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2.	GAS PIPES HAVE NOT BEEN INVESTIGATED AS PART OF THIS SURVEY.

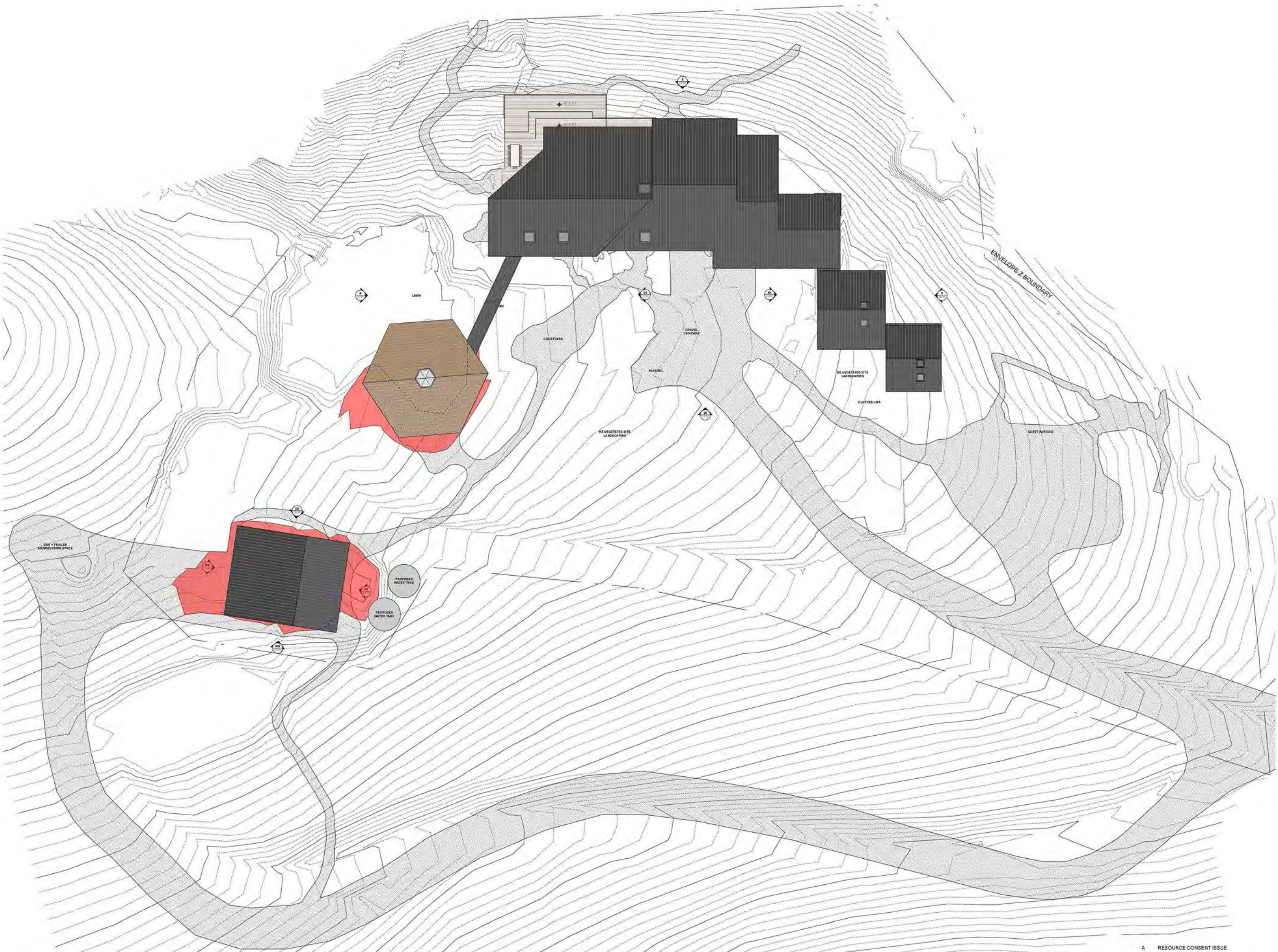
FLOOR AREAS	
EXISTING HOUSE	430m <sup>2</sup>
PROPOSED HOUSE	606m <sup>2</sup>
EXISTING GARAGE + UTILITY	163m <sup>2</sup>
PROPOSED GARAGE	113m <sup>2</sup>
EXISTING DECK	90m <sup>2</sup>
PROPOSED DECK	112m <sup>2</sup>
EXISTING GRAVEL SURFACES	3.361m <sup>2</sup>
PROPOSED GRAVEL SURFACES	2.357m <sup>2</sup>
EXISTING IMPERVIOUS TOTAL:	4.070m <sup>2</sup>
PROPOSED IMPERVIOUS TOTAL:	3.188m <sup>2</sup>

COMPLIANCE		
HEIGHT:		
MAX. HEIGHT OF NEW BUILDINGS	15m	COMPLIANT
PERMITTED BUILDING:		
WITHIN COVENANT AREAS W & Z		COMPLIANT

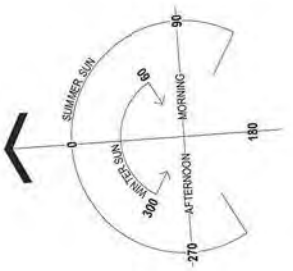
CUT & FILL		
CUT	GARAGE: 165m <sup>3</sup> YOGA ROOM: 28m <sup>3</sup> TOTAL: 193m <sup>3</sup>	193m <sup>3</sup> OF CUT TO BE REDISTRIBUTED AS FILL THROUGHOUT SITE

NOTE: FOR SITE LANDSCAPING & PLANTING PLAN PLEASE REFER TO OZ LANDSCAPES DRAWINGS PACKAGE ATTACHED WITHIN THIS RESOURCE CONSENT.

FOR WASTEWATER & GEOTECHNICAL INFORMATION PLEASE REFER TO COOK COSTELLO REPORT ATTACHED WITHIN THIS RESOURCE CONSENT.







**LEGAL DESCRIPTION**

SITE ADDRESS: 1025 TAUPŌ BAY ROAD  
TAUPŌ BAY  
NORTHLAND 0484

LOT NO: 1  
DP: 567902  
TA: FAR NORTH DISTRICT COUNCIL  
DISTRICT PLAN ZONE: GENERAL COASTAL  
RESOURCE ZONE: OUTSTANDING LANDSCAPE  
WIND ZONE: VERY HIGH  
EARTHQUAKE ZONE: 1 (as per NZS3604:2011)  
EXPOSURE ZONE: D (as per NZS3604:2011)  
SURVEYED SITE AREA: 8.4275 HA

**SURVEY INFORMATION**

SURVEY INFORMATION HAS BEEN TRANSFERRED FROM SITE SURVEY (USING NZ VERTICAL DATUM) AS PREPARED BY WILLIAMS & KING REGISTERED LAND SURVEYORS, DATED 16 DECEMBER 2024.

0.2m CONTOURS OF SITE AREA

**SURVEY NOTES:**

- EXISTING LEVELS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- GAS PIPES HAVE NOT BEEN INVESTIGATED AS PART OF THIS SURVEY.





**CLADDING**  
HOUSE: VERTICAL BANDSAWN SHIPLAP  
VULCAN TIMBER, WALNUT  
LRV: 8 - 10%



**CLADDING**  
YOGA ROOM WALL & ROOF: UNCOATED  
VULCAN TIMBER SHINGLES, NATURAL  
LRV (INDICATIVE): 29%



**ROOF**  
HOUSE: STANDING SEAM LONG RUN  
PROFILE METAL ROOF, FLAXPOD MATTE  
LRV: 0%

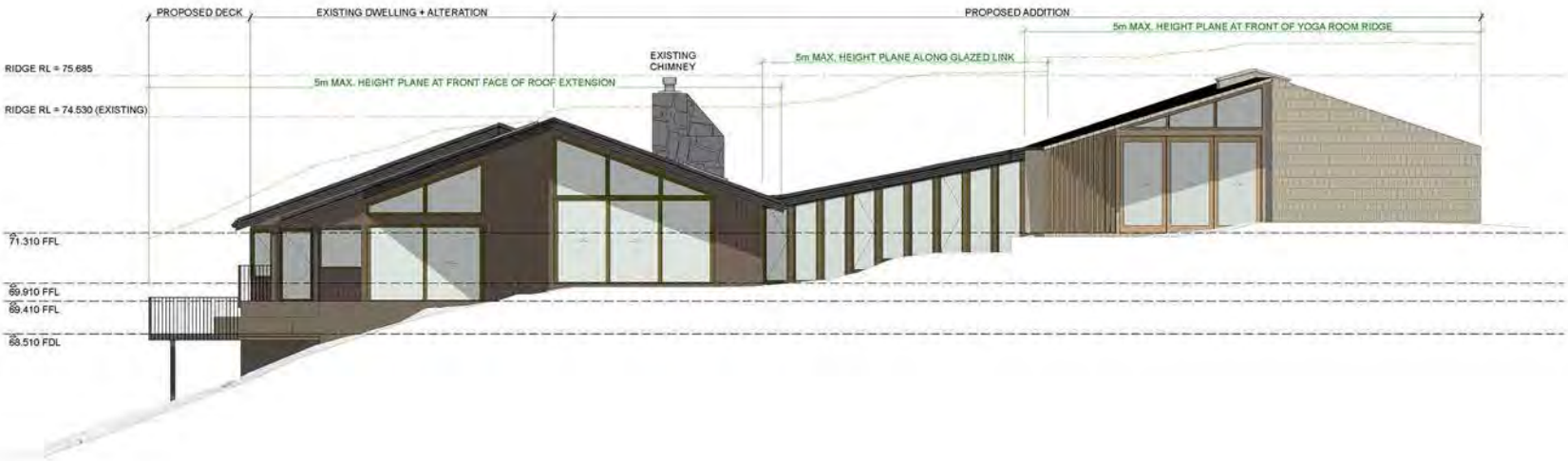


**JOINERY**  
HOUSE: ALUMINIUM JOINERY,  
MEDIUM BRONZE  
LRV: 7%

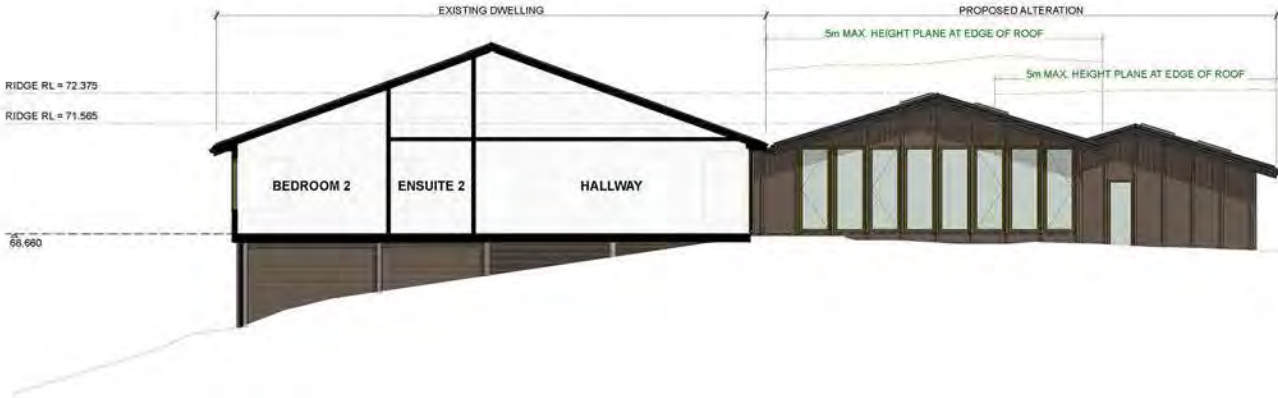


**JOINERY**  
YOGA ROOM: TIMBER JOINERY,  
NATURAL FINISH  
LRV: 15%

N NORTH ELEVATION



N1 NORTH INTERIOR ELEVATION



E EAST ELEVATION



STEVEN  
LAWSON  
ARCHITECTS

STEVEN  
LAWSON  
ARCHITECTS  
LIMITED

TELEPHONE  
+64 9 377 5378  
ADDRESS  
AXIS 1/1A  
1 CLEVELAND ROAD  
PARNELL  
AUCKLAND  
NEW ZEALAND  
EMAIL  
MAIL@STEVENS-LAWSON.CO.NZ

PROJECT TITLE  
TAUPŌ BAY  
JASON FRIEDLANDER, 1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND  
RESOURCE CONSENT

A RESOURCE CONSENT ISSUE

28/03/25

STATUS	NO	AMENDMENTS	DATE ISSUE
			DWG NO.
			(2) 01
PROJECT ID	#Project ID	SCALE	SERIES OF
CAD FILE	0236_Taupō Bay	1:100	ISSUE / REV
DATE	1/04/25	@ A1	-A

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON THE SITE. DO NOT SCALE OFF DRAWINGS. COPYRIGHT RESERVED



**CLADDING**  
HOUSE: VERTICAL BANDSAWN SHIPLAP  
VULCAN TIMBER, WALNUT  
LRV: 8 - 10%

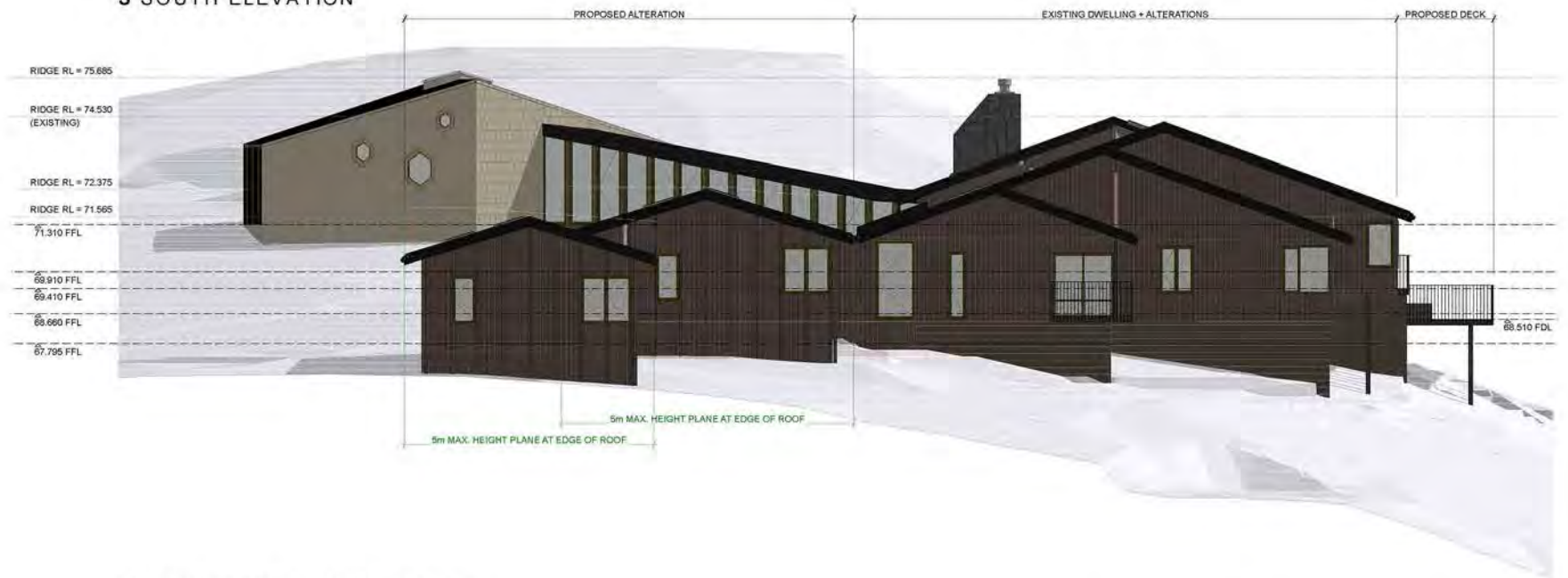
**CLADDING**  
YOGA ROOM WALL & ROOF: UNCOATED  
VULCAN TIMBER SHINGLES, NATURAL  
LRV (INDICATIVE): 29%

**ROOF**  
HOUSE: STANDING SEAM LONG RUN  
PROFILE METAL ROOF, FLAXPOD MATTE  
LRV: 0%

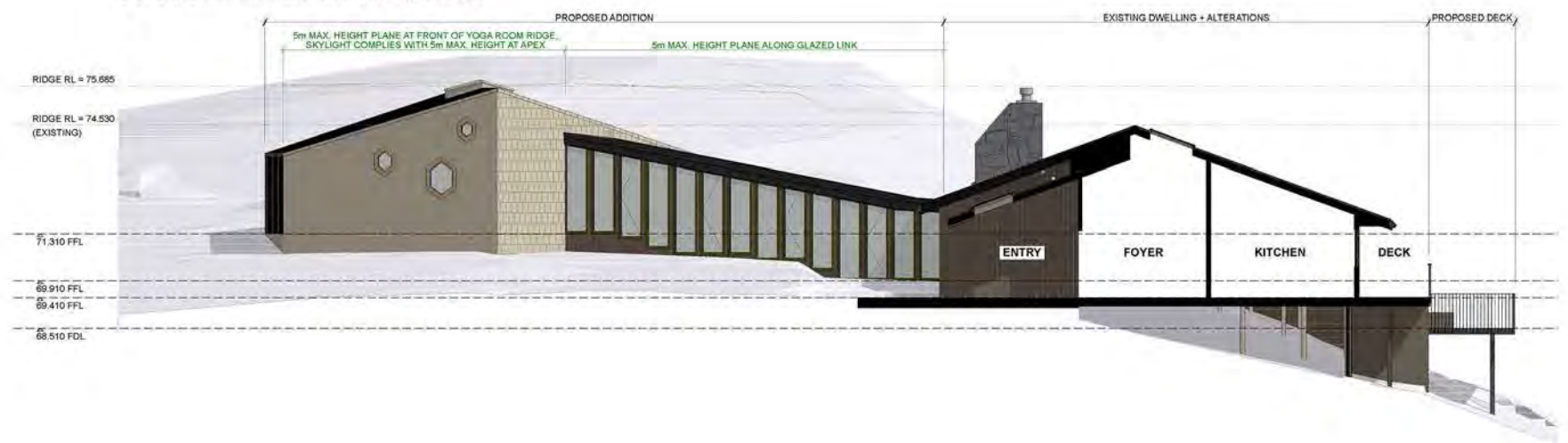
**JOINERY**  
HOUSE: ALUMINIUM JOINERY,  
MEDIUM BRONZE  
LRV: 7%

**JOINERY**  
YOGA ROOM: TIMBER JOINERY,  
NATURAL FINISH  
LRV: 15%

## S SOUTH ELEVATION



## S1 SOUTH INTERIOR ELEVATION



## W WEST ELEVATION



STEVEN  
LAWSON  
ARCHITECTS

STEVEN  
LAWSON  
ARCHITECTS  
LIMITED

TELEPHONE  
+64 9 377 5376  
ADDRESS  
AXIS 1 1A  
1 CLEVELAND ROAD  
PARNELL  
AUCKLAND  
NEW ZEALAND  
EMAIL  
MAIL@STEVENLAWSON.CO.NZ

PROJECT TITLE

TAUPŌ BAY  
JASON FRIEDLANDER, 1025 TAUPŌ BAY ROAD, TAUPŌ BAY, NORTHLAND  
RESOURCE CONSENT

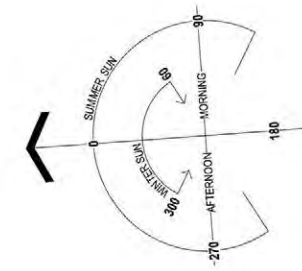
A RESOURCE CONSENT ISSUE

26/03/25

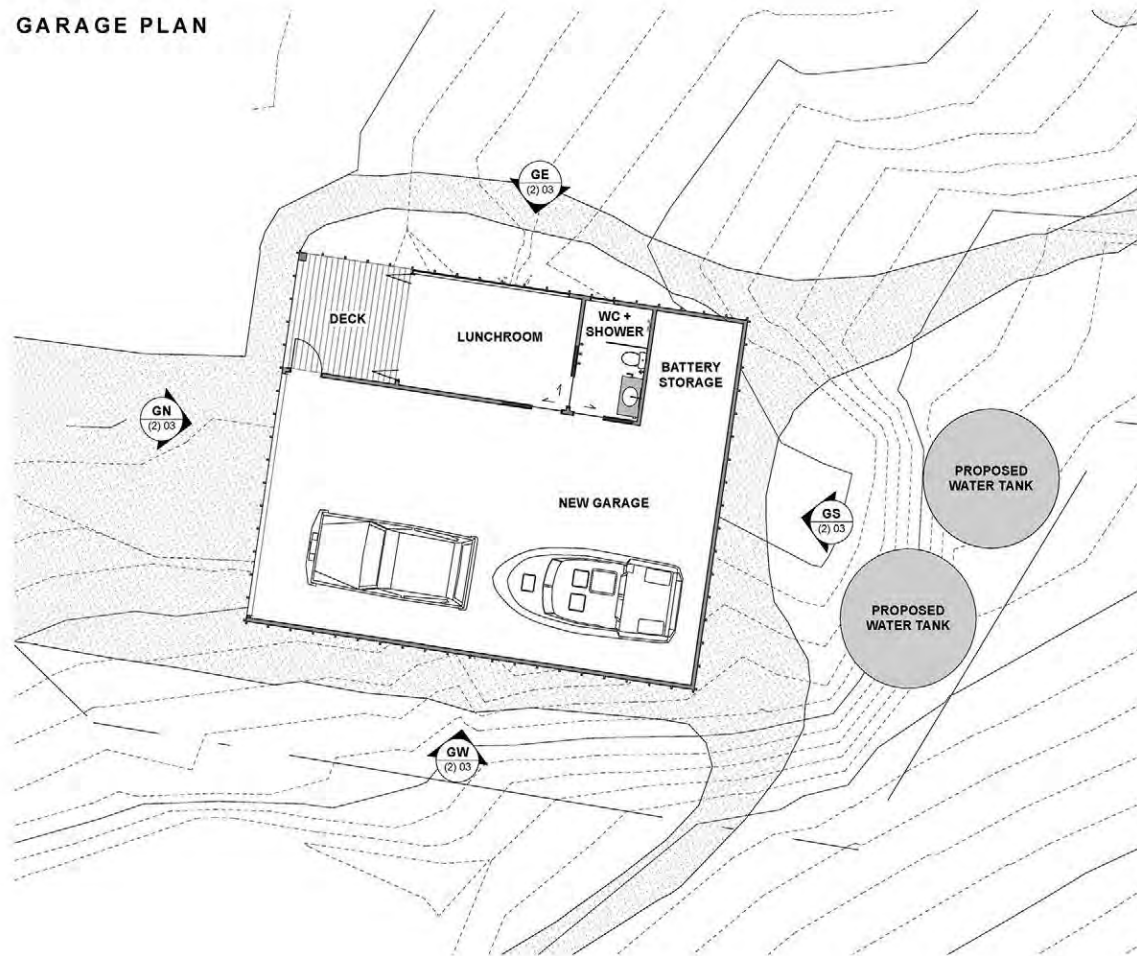
STATUS	NO	AMENDMENTS	DATE ISSUE
SHEET TITLE			DWG NO.
PROPOSED ELEVATIONS: HOUSE			(2) 02
PROJECT ID	#Project ID	SCALE	SERIES OF
CAD FILE	0230_Taupō Bay	1:100	ISSUE / REV
DATE	1/04/25	@ A1	-A

CONTRACTORS MUST VERIFY ALL DIMENSIONS ON THE SITE. DO NOT SCALE OFF DRAWINGS. COPYRIGHT RESERVED.

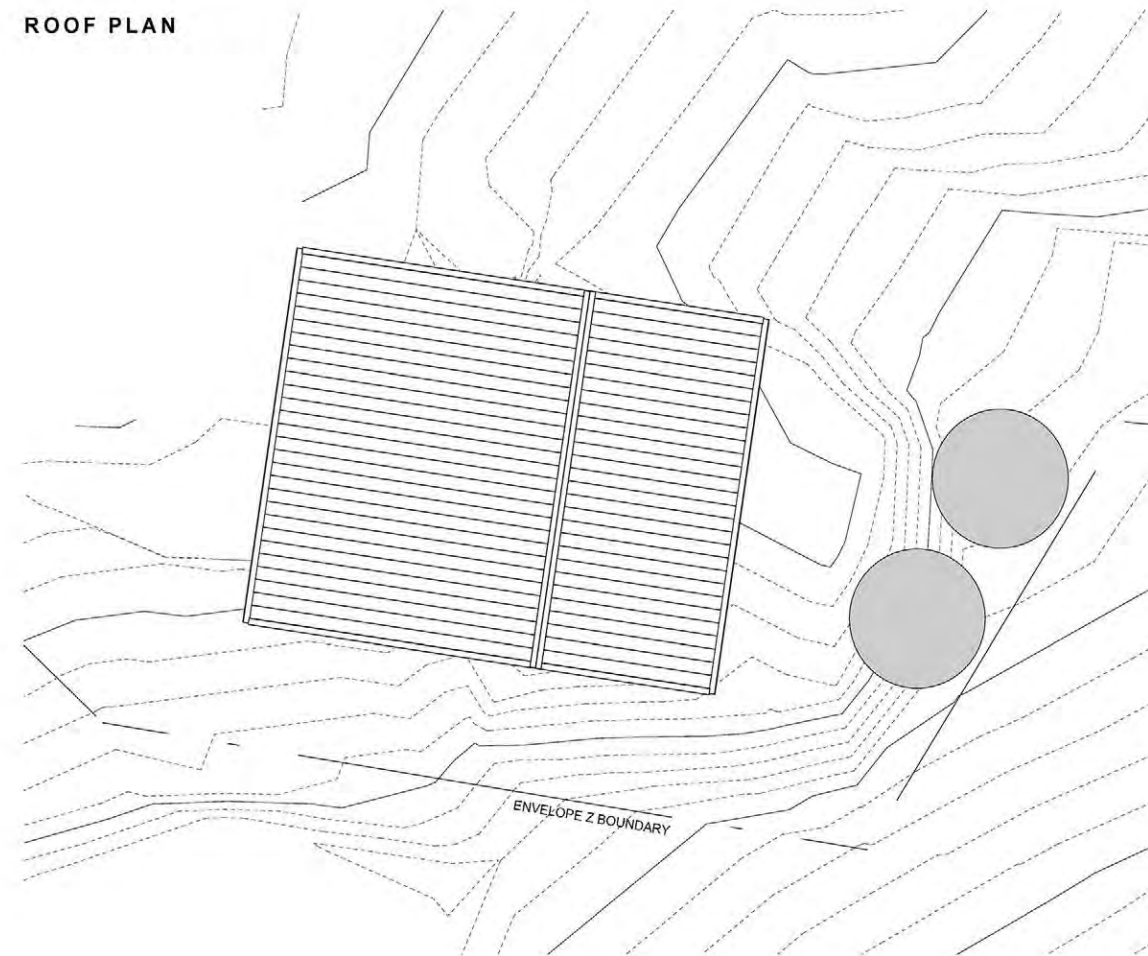




GARAGE PLAN



ROOF PLAN



CLADDING  
VERTICAL BANDSAWN SHIPLAP  
VULCAN TIMBER, WALNUT  
LRV: 8 - 10%



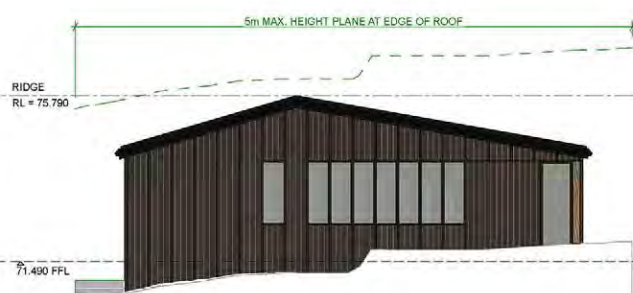
ROOF  
STANDING SEAM LONG RUN PROFILE  
METAL ROOF, FLAXPOD MATTE  
LRV: 6%



JOINERY  
ALUMINIUM JOINERY,  
MEDIUM BRONZE  
LRV: 7%



GN GARAGE NORTH ELEVATION



GE GARAGE EAST ELEVATION



GS GARAGE SOUTH ELEVATION



GW GARAGE WEST ELEVATION

STATUS	NO	AMENDMENTS	DATE ISSUE
SHEET TITLE			DWG NO.
PROPOSED ELEVATIONS: GARAGE			(2) 03
PROJECT ID		#Project ID	SCALE
CAD FILE		0238_Taupō Bay	1:100
DATE		1/04/25	@ A1
SERIES OF			ISSUE / REV
			-A



# ATTACHMENT FIVE

---

LANDSCAPE PLANS BY  
O2 LANDSCAPES

# Taupō Bay

*1025 Taupō Bay Road*

03-2025

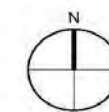
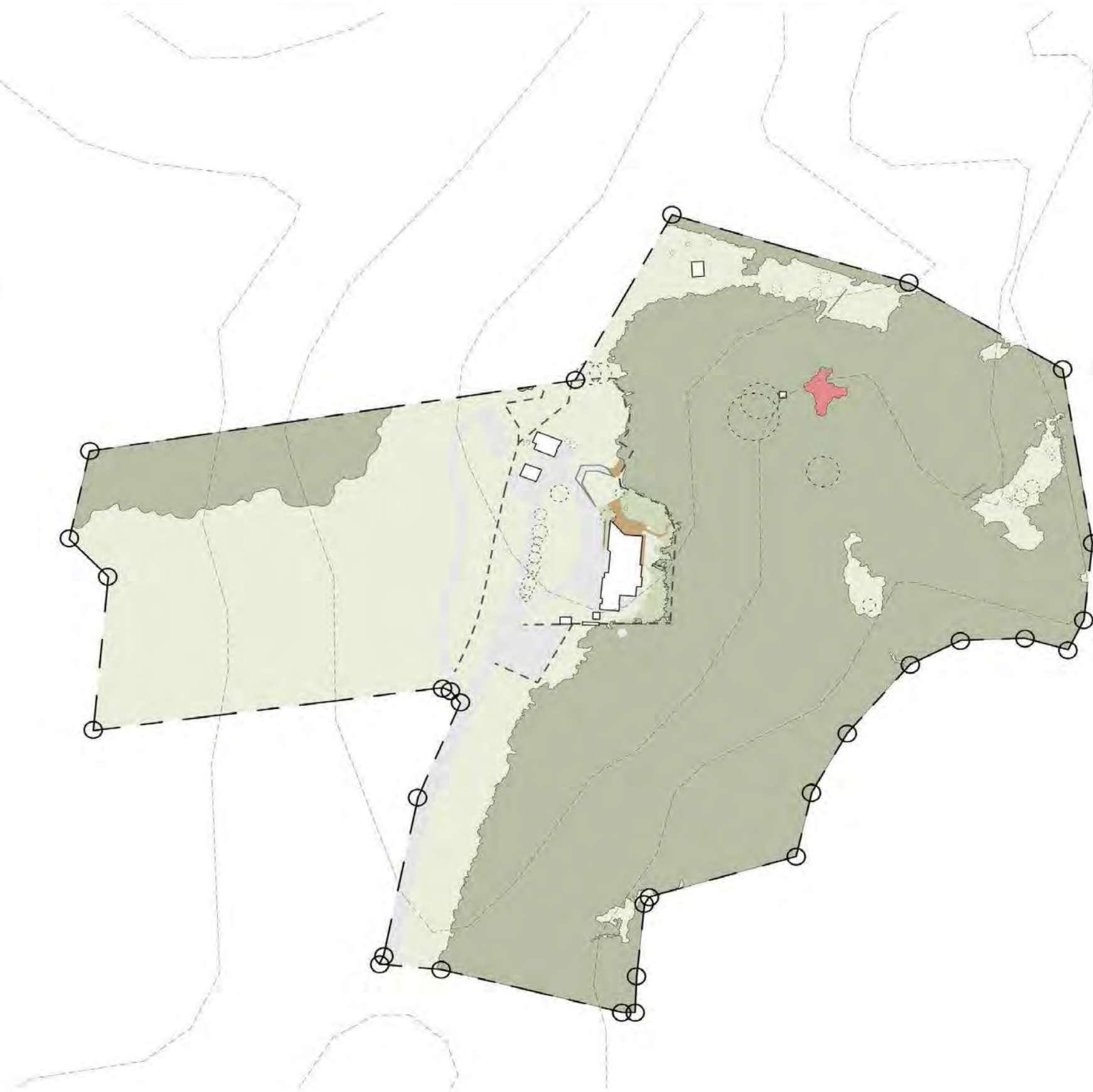
LANDSCAPE LAYOUT - RESOURCE CONSENT

[o2landscapes.com](http://o2landscapes.com)

# Drawing schedule

CODE	REV.	DRAWING	SCALE
Cp01	01	Existing context plan	1:2000
Sp01	01	Existing site plan	1:500
Mlp01	02	Master layout plan	1:2000
Lp01	02	Landscape layout plan	1:500
Plp01	02	Hillside planting plan	1:500
Gi01	01	General installation instructions	NTS
Gi02	01	Planting specification for restoration areas	NTS
Gi03	01	Soil preparation for garden areas	NTS



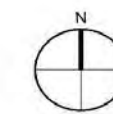






# PLANTING KEY

- 1  *Metrosideros excelsa*
- 2  *Metrosideros robusta*
- 4  *Vitex lucens*
- 22  *Podocarpus totara*
- 17  *Planchonella costata*
- 3  *Pterophylla sylvicola*
- 23  *Rhopalostylis sapida*
- 21  *Cordyline australis*
- 15  *Leptospermum scoparium*
- 14  *Kunzea robusta*
- 16  *Myrsine australis*



---

# Layout specifications for Friedlander, 1025 Taupo Bay Rd

---

O2 Landscapes  
7/03/25  
(0274) 999966

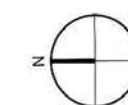
These specifications accompany the layout plan (lp01) for 1025 Taupo Bay Rd. Contractors and subcontractors are to confirm all dimensions and levels on site prior to commencing work.

No. Item		Dimensions (mm)	Notes
L.01	Existing driveway	4000mm wide	The existing asphalt driveway will finish at the drawn line annd no longer form a loop. L2 continues on from this point through to the house as gravel.
L.02	Gravel driveway and parking	min. 4000mm wide	A proposed gravel driveway leads to house entry and includes a turning bay. Gravel topcoat (15mm deep) over (90mm deep) GAP20 compacted basecourse. The edges of the gravel will merge with the surrounding garden. Gravel topcoat to be selected in consultation with client.
L.03	Guest parking		There is an existing gravelled area within this zone, the outside line of this pre-existing area has been reshaped to a smaller footprint. To be cleaned and top-dressed with gravel to match the proposed gravel driveway. Gravel topcoat (15mm deep) over (90mm deep) GAP20 compacted basecourse. The edges of the gravel will merge with the surrounding garden. Gravel topcoat to be selected in consultation with client.
L.04	Existing gravel track		An existing gravel road runs through the paddock and will be utilised for the proposed garage access.

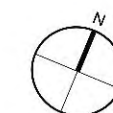
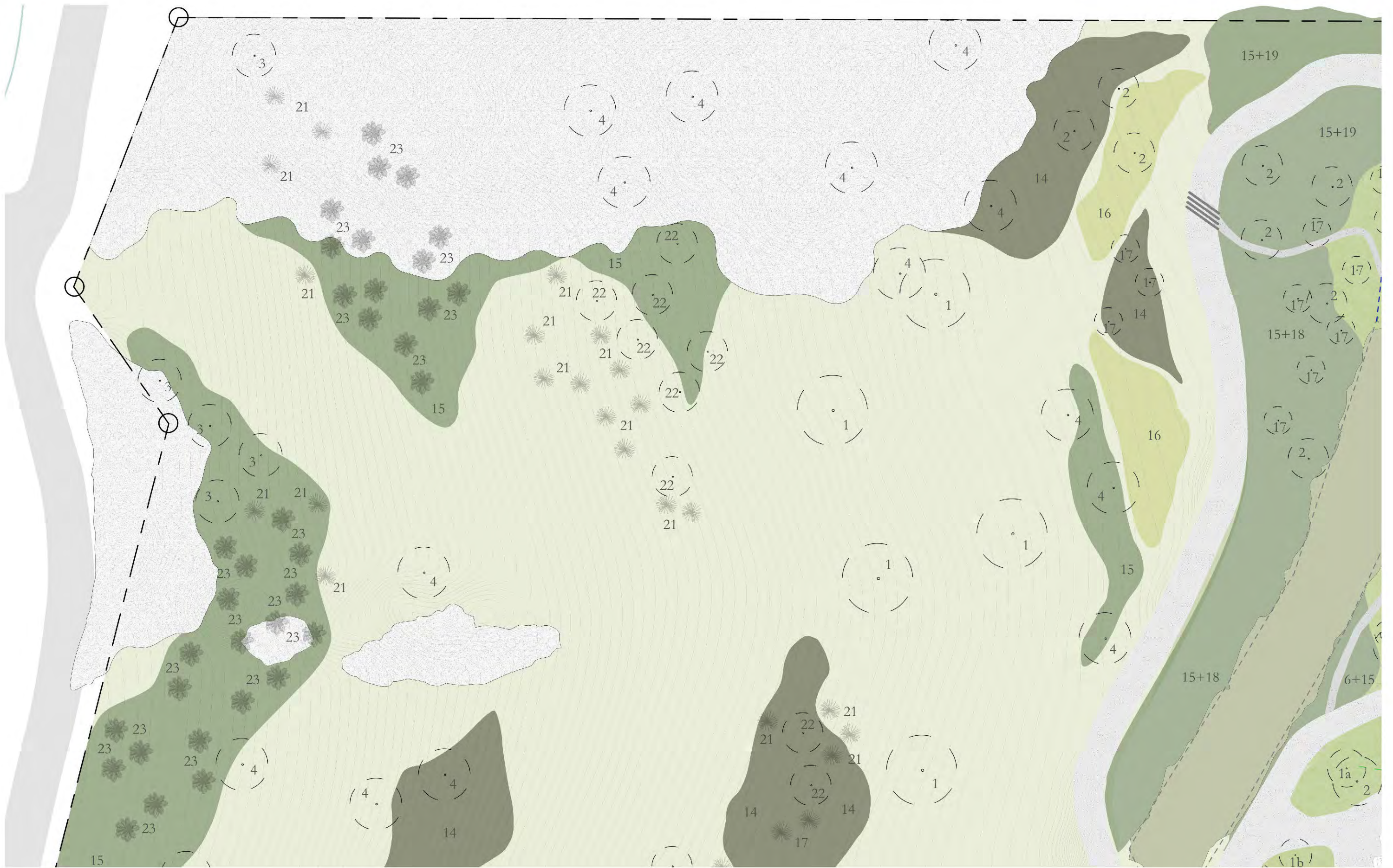


L.15	Existing R.C. plantings		Existing revegetation plantings from previous resource consent applications will remain.
L.16	Proposed garden areas		Gardens within 10m of the building include species that have been actively considered against FENZ guidelines. The new gardens will contribute to screening the building from the west. Garden within L16 includes plant species (3,5,6,7,10), refer to planting specifications.
L.17	Utility area		A vegetable garden, washing line, small garden shed and compost bays are proposed within a rabbit-proof fenced area.
L.18	Cut stone paving	Stones ranging from 300mm to 1000mm in diameter	Selected basalt boulders existing within the gardens will be cut into slabs for stone paving. This paving will form access and outdoor living space at selected points around the buildings.
L.19	Deck extension		Ref. architects' plans.
L.20	Barbecue area		An outdoor cooking table is proposed here.
L.21	Rammed-earth wall	150mm wide x 18000mm long x 1500mm high	A long rammed-earth wall creates separation from the utility area and directs visitors toward the house from the carpark.
L.22	Water tanks		Ref. architects' plans.
L.23	Existing watertank		Location of existing watertank.
L.24	AES septic area		AES septic area (refer Cook Costello report).
L.25	Pasture		Fenced pasture on the west-facing hillside which will be planted during planting seasons in 2025.
L.26	Grass		Areas of grass to remain.
L.27	Rabbit proof fence		To be specified later in detailed design.











# Plant specifications for Friedlander, 1025 Taupo Bay Rd

O2 Landscapes  
19/12/24  
(0274) 999966

No.	Species/variety	Common Name	Grade	Height (m)	Spread (m)	Quantity	Notes
1	<i>Metrosideros excelsa</i>	Pōhutukawa	PB8	4	4	6	New specimens proposed on western hillside.
1a	<i>Metrosideros excelsa</i> - Existing	Pōhutukawa	N/A	4	4	14	To remain in place.
1b	<i>Metrosideros excelsa</i> - Onsite transplants	Pōhutukawa	Field	4	4	9	Existing windbreaks of pōhutukawa are to be utilised with particular specimens transplanted for a more naturalistic woodland arrangement.
2	<i>Metrosideros robusta</i>	Northern rata	45L	10	5	13	Large specimens of northern rata are proposed where they will screen building additions.
3	<i>Pterophylla sylvicola</i>	Towai	PB8	4	3	10	Towai is a small tree from northern New Zealand that has long racemose flowers and layered branching structure.
3a	<i>Pterophylla sylvicola</i> - Existing	Towai	N/A	4	3	1	A mature specimen sits at the top of a small gully within the existing forest.





11	<i>Vaccinium sp.</i>	Blueberry	PB8	2	0.8	12	A member of the Ericaceae that grows within similarly acidic soils to <i>Pterophylla</i> and <i>Sticheus</i> . An edible species in close proximity to the house.
12	<i>Freyinetia banksii</i>	Kiekie	PB5	Climbing	Spreading	16	A climbing, sword-leaved member of the Pandanus family. Leaves are densely tufted towards stem ends, spirally arranged, producing white flowers in November.
13	<i>Veronica syn. (Hebe) ligustrifolia</i>	Northland Hebe	PB3	2	1	45	A pale-green Hebe species from northern New Zealand. A common component of coastal shrublands. The white flowers are visited frequently by pollinators.
14	<i>Kunzea robusta</i>	Kanuka	RT	5	2.5	400	Areas of existing kanuka forest are to be extended where desirable.
15	<i>Leptospermum scoparium</i>	Manuka	RT	2	1.5	450	Manuka is to be planted in association with the existing kanuka for establishment of nīkau.
16	<i>Myrsine australis</i>	Red māpou	RT	4	2	130	An excellent revegetation species that often occurs as a pioneer species on dry hillsides and road cuttings.
17	<i>Planchonella costata</i>	Tawapou	PB8	5	4	8	Tawāpou is a tree of northern coastlines, that bears dark purple fruits that are attractive to kererū. It has dark-green, pleated leaves, and assumes an upright growth habit.



18	<i>Pomaderris kumeraho</i>	Kūmarahou	PB3	2	1	40	Kūmarahou is native shrub often found on road cuttings and in dry forests. To be planted with manuka below the existing fenced plantings near the new garage.
19	<i>Dacrydium cupressinum</i>	Rimu	PB8	15	4	25	A native podocarp with long, pendulous foliage. To be planted on the western hillside.
20	<i>Coprosma arborea</i>	Māmangi	PB5	4	2	70	This large species of <i>Coprosma</i> is to planted in association with nīkau toward the bottom of the western hillside.
21	<i>Cordyline australis</i>	Cabbage tree	PB5	5	1	50	Generally a lowland species that grows in a variety of conditions. The fruit are the preferred fruit of Kereru. Cabbage trees are to be planted in association with tōtara.
22	<i>Podocarpus totara</i>	Tōtara	PB8	6	6	12	Lowland tōtara is a large native tree that is associated with farmland throughout New Zealand. The fruit are edible (and tasty), and the confluence of where birds and people can find sustenance is interesting.
23	<i>Rhopalostylis sapida</i>	Nīkau	PB8	6	1	33	Nīkau palm occurs naturally in coastal areas. Known for their distinct fronds and green trunk that bears horizontal leaf scars. A preferred fruit of Kereru.



1. *Metrosideros excelsa*



2. *Metrosideros robusta*



3. *Pterophylla sylvicola*



4. *Vitex lucens*





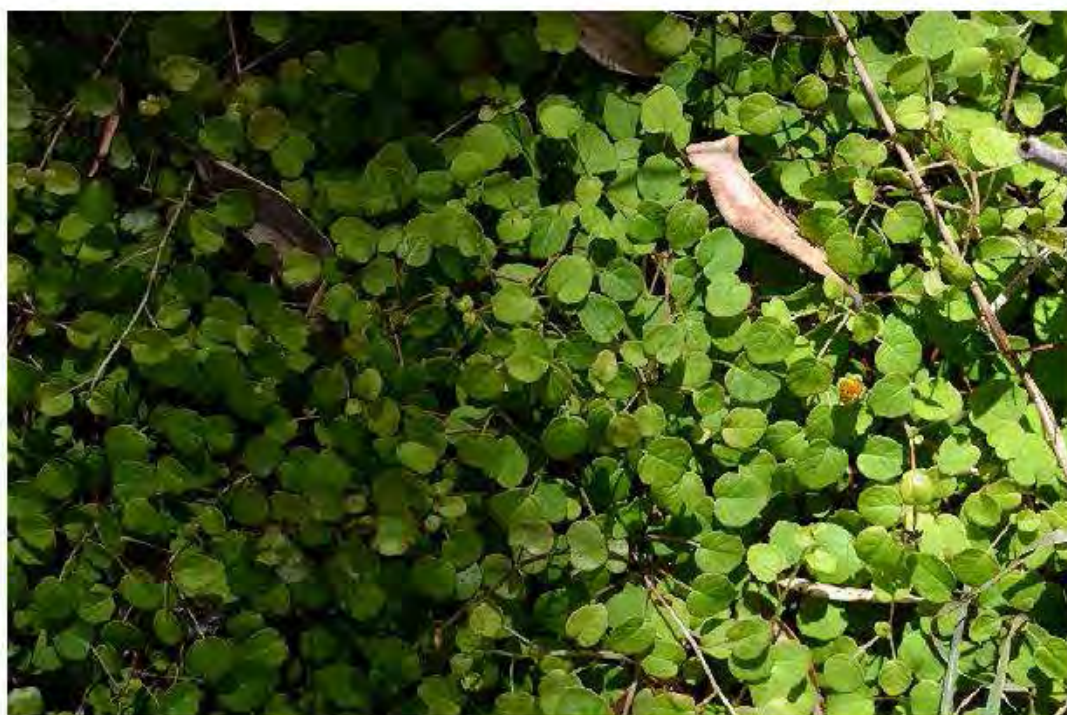
5. *Pseudopanax gilliesii*



6. *Coprosma rigida*



7. *Fuchsia procumbens*



8. Pear 'Seckel'





9. *Sticherus flabellatus*



10. *Pittosporum pimeleoides* subsp. *pimeleoides*



11. Blueberry



12. *Freycinetia banksii*





13. *Veronica* syn.  
(*Hebe*)  
*ligustrifolia*



14. *Kunzea robusta*



15. *Leptospermum*  
*scoparium*



16. *Myrsine australis*





17. *Planchonella*  
*costata*



18. *Pomaderris*  
*kumeraho*



19. *Dacrydium*  
*cupressinum*



20. *Coprosma*  
*arborea*





21. *Cordyline australis*



22. *Podocarpus totara*



23. *Rhopalostylis sapida*





---

# 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	<p>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.</p> <p>Examples of plant names follow: <i>Mazus novaezeelandiae</i> subsp. <i>impolitus</i> f. <i>hirtus</i> <b>Genus:</b> <i>Mazus</i> <b>species:</b> <i>novaezeelandiae</i> <b>subspecies:</b> subsp. <i>impolitus</i> <b>forma:</b> f. <i>hirtus</i> <b>variety:</b> var. <i>hesperia</i> <b>'Cultivar':</b> 'Bearss'</p>
P.2	Plant layout and placement, including spacings	<p>The placement of plants is an integral part of the design and the way 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 stuctures 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.</p>



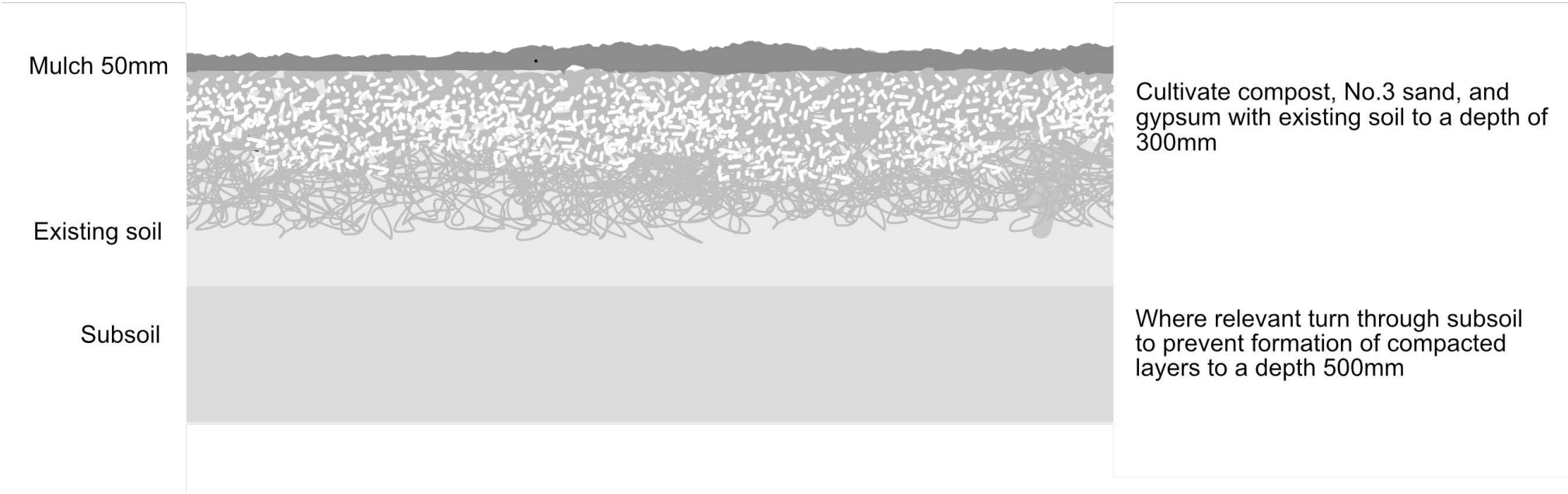
P.3	Planting level	Planting practice is to be undertaken to a high horticultural standard. It is the responsibility of contractors to achieve the correct planting level. Unless stated otherwise, the top of the rootball/base of trunk should be planted 20mm above the finished soil level (allowing for mulch). 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. Mulch should always cover dripline irrigation pipe. If dripline becomes exposed, further mulching will be necessary to hide irrigation lines.
P.5	Staking	It is the responsibility of contractors to ensure 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. Any species that the successful contractor is unable to order at an early stage must be itemised at least 4 months prior.

---

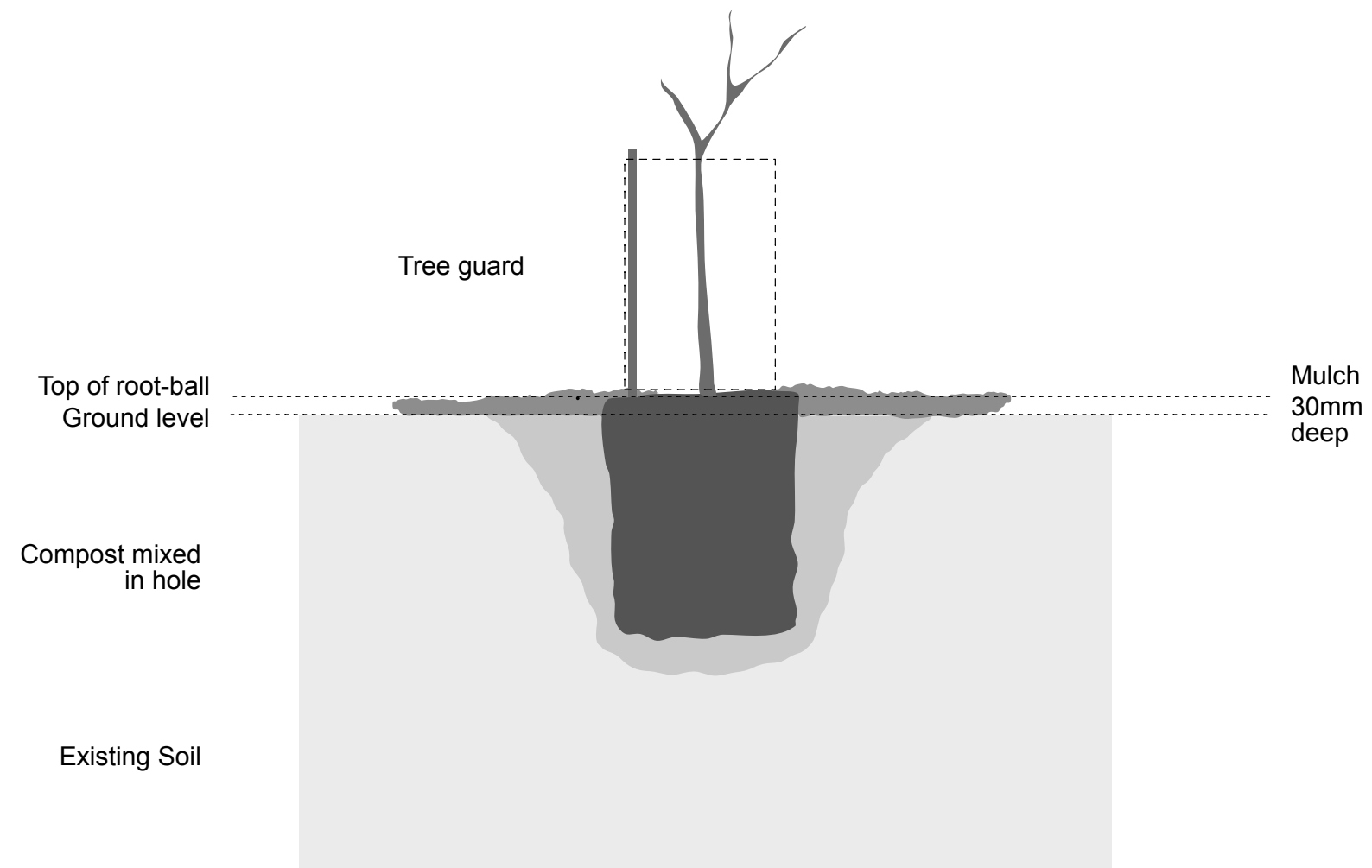
## MATERIALS

---

M.1	Finishes	For confirmation of material finishes refer to the layout specifications.
M.2	Hardscape	Concrete, grout and mortar are to be mixed with ratios and materials stated in the layout specifications.









**Proposed subdivision by Waikopua Trust, Taupo Bay, Northland**

## **ASSESSMENT OF LANDSCAPE, NATURAL CHARACTER AND VISUAL EFFECTS**

**May 2020**



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



## **INTRODUCTION**

This report follows a much earlier document that was prepared in 2009 as part of the technical support material for a resource consent application for a 3-lot subdivision of Lot 1 DP63144 (the Site) located on the North margin of Taupo Bay. That application was granted consent by Far North District Council's Commissioner in a decision issued in 2009 and lapsed 6 years ago.

The Waikopua Trust, as holder of the expired resource consent, is now seeking to reinitiate the subdivision of the property in a more modest way by seeking a single additional allotment.

By very deliberately adopting the structure and much of the content of the earlier report that remains relevant in *this* document, it is intended that it be read alongside the earlier assessment and its related attachments, which strongly informed the issuing of the lapsed consent.

The report will describe the site, its context, the proposal and proposed mitigation measures. It will evaluate any potential adverse visual or landscape effects and will assess the proposal against the relevant statutory documents.

This amended report reflects an updated subdivision scheme plan prepared by Williams and King (ref 22633, rev. 24.7.20).

## **THE SITE AND ITS CONTEXT**

The Site, its context and main features are illustrated in Attachment One: Vantage Point Locations, and Attachment Three: Landscape Integration Concept (the Concept). Access to the site is from Taupo Bay Road, some 500 metres before the entrance to the settlement. The existing driveway is lined with pines (*Pinus radiata*) of some 15-20 metres in height, and climbs quickly onto a ridge which overlooks Taupo Bay.

A well-established dwelling is located near the northern portion of this ridge as it rises through the Site. This long, horizontal and stepped building is notched slightly into the seaward edge of the ridge and seen to nestle into the contextual vegetation. When experienced from either within or outside the property, this relatively voluminous structure is seen to be well integrated in the landscape, largely by virtue of its form, texture and colour.

Whilst the inland face of the ridge is primarily under pasture, the steeply sloping seaward escarpment is largely clad with regenerating native vegetation and older pohutukawa. This indigenous cover is dominated by *Leptospermum scoparium* (manuka), with limited numbers of other species such as *Coprosma robusta* (karamu), *Cordyline australis* (cabbage tree / ti kouka), tree ferns and some small *Metrosideros excelsa* (pohutukawa). At the northern end of the property, Okioire Pa is located on a small headland which contains the northern end of the beach and is labelled on the Concept.

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



To the north of the Site, a number of other buildings are visible on the ridge (seen in Attachment One and Panorama VP8 in Attachment Two). These buildings are more prominent than the larger dwelling on the application site, due largely to their reflective colouring. They are not located on the Applicant's land.

The settlement itself is clustered along and behind the beach on the backshore flat. Some dwellings at the northern end of the developed area are located at the base of the steep escarpment below the Site. Viewed from the sea, the settlement appears as a narrow ribbon of development with an elevated backdrop of land clad with a mosaic of bush and pasture.

Taupo Bay is nestled into an imposing broader coastal framework. To the north, a series of rocky coves and headlands run towards Cone Rock. This terrain is steep and convoluted, with a pattern of indigenous coastal vegetation, and grazing. The headlands typically rise to between 80 and 200m above the adjacent sea and identified pa sites have a scattered presence. Immediately to the north of the Site, a property that was clad in a mature pine plantation at the time of the lapsed consent has now been harvested and replanted in pine.

To the south of Taupo Bay is the imposing, rocky mass of the northern head of Whangaroa Bay provides an imposing containment. Huia Rock, Castle Peak, Pukekukou Rock and Kowhairoa all rise to around 200m as peaks in this landform. This terrain lies within the protected Mangonui Forest and is defined as both an Outstanding Landscape and an area of Outstanding Natural Character by the Regional Policy Statement for Northland.

## **EXISTING STUDIES AND ASSESSMENTS**

### **Far North District Landscape Assessment (1995) LA4 Landscape Architects**

This broad-scale study, carried out in 1995, assessed the landscape of the entire Far North District, with the exception of areas of urban settlement. The application site lies within a coastal landscape unit described as Whangaroa North Head to Hihi Beach (C25). This unit fits within a landscape category of *rocky coast interspersed with beaches* and consists of a relatively narrow coastal flank typically running up adjacent to the coastal ridgeline. The landscape category is common along this portion of the District's shoreline, where the coast tends to be quite convoluted and indented with rocky headlands, punctuated by small bays within low lying portions of the landform. Taupo Bay is therefore typical of this landscape type.

This landscape unit was assessed as having an overall sensitivity rating of 6 on a range of 1 (low) to 7 (extreme) and therefore defined as being of high sensitivity. Accordingly, it has been deemed to be an outstanding landscape within the Far North District Plan. Aspects identified as characterising this unit include:

- Steep rocky coast.
- Convoluted indented alignment of coast.
- Prominent headlands.



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



- Well defined ridgelines.
- Indented beaches.
- Scattered cladding of pohutukawa along coastal bank.
- Extensive blocks of manuka shrubland.
- Semi-exposed to exposed coast.

Elements and patterns recorded as detracting from landscape character and value include the impact of coastal resort settlements and pine shelterbelts in Taemaro Bay.

Aspects which contribute to the ability of the landscape to visually absorb change without significant modification of its character (VAC) include the effect of existing built development, screening by pockets of mature vegetation (limited) and the enclosure of bays. Elements that reduce VAC are the sensitivity of coastal headlands, ridgelines and flanks; the limited distribution of existing built developments; and the limited extent of vegetation of a scale adequate to screen development.

With respect to the Taupo Bay coastline, it is considered that most of these observations from the 1995 assessment continue to offer helpful guidance when considering the application site, notwithstanding the circumstance of having been superseded by the more recent assessment that is about to be outlined in the following.

**Northland Regional Policy Statement Landscape Assessment (2016) Littoralis Landscape Architecture and Simon Cocker Landscape Architecture**

This region-wide study was prepared to inform the Proposed Regional Policy Statement for Northland (RPS) - which is now predominantly operative - and, in the process, to provide an updated basis for the outstanding natural landscape (ONL) mapping underpinning the three district plans which cover the region. A significant driver for the update of the RPS was the updated NZCPS 2010, with its informing policies guiding the landscape assessment.

Far North District Council is in the process of updating its Plan and adopting the RPS mapping, subject to some possible minor refinements to those mapped extents in response to community feedback and submissions. Being considerably more recent than the FNDC study, the RPS assessment is based upon the more current NZCPS, case law and methodology that is two decades more recent. It also accounts for changes within the landscape that have occurred during that period.

Whilst the area to the south and inland of Taupo Bay lying predominantly within the Mangonui Forest conservation estate continues to be identified as an outstanding natural landscape, the terrain extending north of the Bay (including the Site) fell below the "outstanding" threshold within the RPS landscape assessment and so is not deemed to be an ONL under the RPS.

In light of the disparity between the assessments outline, the relative currency of the RPS study, and the hierarchical primacy of a regional policy statement over a district plan, this assessment has adopted the RPS

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



assessment findings as being more correct, particularly when analysing the proposal against the statutory framework.

**Northland Regional Policy Statement Natural Character Assessment (2016) Pacific Eco-Logic Ltd**

As part of the Regional Mapping Project that included the regional landscape assessment outlined above, the identification and description of areas of High and Outstanding natural character was also undertaken. This project was particularly influenced by policies 13 and 14 of the NZCPS.

The extent of indigenous vegetation cladding the eastern, coastal flank of the Site forms part of a small parcel of high natural character (as distinct from being outstanding), that also extends as a narrow belt along the shoreline margin a little further to the north.

The key natural character elements and values found within that area are set out by the assessment as follows:

Summary Description	Steep rock headlands & faces with pohutukawa forest & treeland and kanuka-mixed broadleaved scrub
Contributing Values	Largely indigenous vegetation with few pest plants. Some relatively mature indigenous vegetation relative to the site conditions (pohutukawa forest). Minimal human-mediated hydrological or landform changes and few obvious human structures

**THE PROPOSAL**

The applicant proposes to subdivide the property into 2 allotments. The main elements of the proposal are as follows:

- Lot 1 would occupy the northern-most portion of the site, spanning from Taupo Bay Road to the coast, and contain the existing residence. Containing a total of 8.45 hectares, approximately half of this lot is proposed to be subject to a Land Covenant to conserve the Okiore pa site and indigenous coastal flank vegetation. An esplanade reserve of 0.58ha would occupy the coastal margin of this allotment.
- Lot 2 would take in the balance of the property, reaching from the primary Taupo Bay Road corridor to the west, to the inland boundary of smaller titles associated with the small stub of Taupo Bay Road that runs alongside the northern end of the beach. It would be 6.62ha in area. An identified building platform measuring 40m x 15m, shown on the Concept, is proposed. This platform would have a finished ground level of RL 44.50m or lower. It has been positioned in close consultation with engineers Cook Costello in relation to safe separation from historic slip heads on the coastal flank to the east. The seaward flank of this title, which continues around the southern edge of the title, is also intended to be protected under a Land Covenant.

The proposal would therefore result in a single additional dwelling being constructed on the property. The proposed building area is located in an existing grassed area, meaning that no native vegetation would be removed.



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



**Integration and mitigation measures**

There is potential for development sited in association with this prominent ridge-top to be highly visible and thus generate adverse visual effects or adverse effects on the Natural Character of the Coastal Environment. The proposal seeks to avoid or mitigate those effects through a number of methods.

Despite its substantial scale, the recessive character of the sizeable existing building located within proposed Lot 1 offers a useful illustration of how a building that is sensitively located and designed can sit relatively unobtrusively within its landscape context. Accordingly, it is proposed that controls applying to a further building are included as conditions of consent.

Amongst the measures recommended to ensure that the intrusion of a building on proposed Lot 2 is minimised are controls over:

- Building location, with a carefully selected envelope being defined;
- relationship between built form and natural contour, so that a structure fits into and with, the landform;
- the height of a house relative to finished and natural ground level;
- building articulation to promote shading of seaward facades and to minimise emphatic vertical and horizontal lines within the structure;
- materials and reflectivity;
- direction of parking and utility areas away from public view;
- earthwork effects associated with access, building platform and utility area creation;
- the under-grounding of services;
- the incorporation of water tanks into the building or immediately adjacent and fully screened by vegetation and/or the building;
- garaging to also be incorporated into the building design; and
- precluding any ancillary buildings outside of the defined building envelopes.

The expression of these measures is illustrated in a drawing entitled Proposed Lot 2 – Section AA' that is found in Attachment Three. This drawing illustrates how a building would be modestly benched into the landform and resulting spoil used to add a measure of height to the crest of the natural spur found immediately to the west. This measure of fill would raise the terrain by between 1.5m (northern end) and 4.5m (southern end) above the nominated highest level of the proposed building platform. On average, this means that the backdrop landform is almost as elevated as the likely eave level of a building complying with proposed height control.

Having established this topographic base, the proposal then builds upon that landform with planting to create a western backdrop to the building which would avoid the structure being “skylined” when seen from lower elevations. It would also avoid potential western visibility from Taupo Bay Road (see Panorama VP2) or the nearby Bowden Road that ascends a hill inland (Panorama VP3).

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



Existing native (and exotic) vegetation on site contributes to the integration of the existing residence within proposed Lot 1 by providing a broad foreground that stretches off to provide enframement to either side of the existing lodge residence. In response, the application provides for almost all existing native vegetation within the site to be protected, enhanced and extended to provide additional integration for the proposed development.

Whilst providing a useful backdrop to the existing residence, the pine trees that line the driveway through the property also create a dramatic sawtooth effect along the coastal ridgeline when witnessed from outside the property, as seen particularly in Panoramas VP1, 3, 5 and 8. In recognition of this dichotomy, the proposal recommends a staged replacement strategy, as will be outlined in what immediately follows.

The Landscape Integration Concept that is presented in two scales in Attachment Three to this report indicates the form and placement of proposed planting within the site. The main features of the integration strategy are as follows:

1. The creation of substantial blocks of native planting which will link with the existing bush and provide further separation between the existing home and the building site on proposed Lot 2.
2. Removal of the pines along the majority of the ridgeline to make way for proposed mass planting of native coastal forest vegetation. A small pocket of these trees forms an immediate backdrop to the existing dwelling and is therefore intended to be retained for up to 5 years whilst proposed indigenous planting along this part of the ridgeline develops to a scale adequate to inherit that role. A further portion of the pine belt alongside the initial portion of the drive that climbs to the ridgeline is proposed to be retained for no less than 3 years to maintain an interim screen/backdrop to a dwelling on proposed Lot 2.
3. More detailed contextual planting around the existing and future buildings to further assist with their visual integration. It is suggested that this portion form a condition of consent requiring a planting plan at the time when applications are made for building consent. Whilst already reasonably resolved in the concept plan, the precise footprint of the building and circulation will be finalised in the detailed documentation required for building consent. It is intended that that there shall be a limitation of one dwelling per allotment and a restriction upon any further subdivision.

A zone of fire-resistant vegetation is envisaged for the immediate environs of the proposed building area, including provision to replace approximately 10m width of manuka adjacent to the southern edge of the building location and its potential replacement with less flammable species.

A weed control programme to cover the bush / regenerating areas is intended to be initiated to run concurrently with the general maintenance of the proposed planting, as set out in an attached Landscape Management Guideline (the Guideline). This will be undertaken for a minimum of 3 years.

A landslide which occurred across part of the eastern boundary of the Site in 2007 is one of a sequence of ground movement scars across that area of the overall property. These display a reasonable measure of natural colonisation by indigenous species, but also host a limited range of invasive exotic species. It is



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



likely that native plant associations will progressively prevail, but this application provides an opportunity to actively manage that restoration and achieve an intact indigenous canopy more rapidly. These measures are also outlined in the Guideline.

**ASSESSMENT OF LANDSCAPE, NATURAL CHARACTER AND VISUAL EFFECTS**

The nature of the proposal and elevation of the subject site means that it has the potential to be visible from a sizable viewing catchment. The principle potential viewing audiences are identified as follows:

1. Taupo Bay Road approaches.
2. Those living in properties accessed by Bowden Road.
3. People on the beach (north end).
4. People on the beach (south end).
5. Residents and visitors to Taupo Bay settlement
6. Users of the coastal marine area (CMA).

<b>Viewpoint 1 and 2</b>	<b>Views from Taupo Bay Road and associated dwellings.</b>
<b>Elevation / Distance of Viewpoint from Site</b>	10-60 metres ASL. 20-1,000 metres from subject site. Refer to Panoramas VP1 and 2.
<b>Who is Affected?</b>	Occupants of vehicles eastbound on Taupo Bay Road and occupants of limited dwellings immediately associated.
<b>Existing View</b>	The existing view of the subject site for this viewer group is primarily rural, with the landscape characterised by pasture, exotic shelter trees and stands of remnant bush. A limited view of the Bay is available from the more elevated portion of the road as it eases over a brow to drop towards the sea (see VP1) The existing building on the site is blocked from view by the pines along the property drive. The Lot 2 location is similarly screened, but obscured by intervening terrain and vegetation regardless. Scattered dwellings and their accessways are in evidence in the landscape, with some - elevated above the valley floor - being more prominent. A number of new titles and associated accessways have recently been created to the west of the application site and the progressive development of these lots has brought an increasing sense of settlement and development to this rural hinterland to the bay. The view catchment is contained by the steep topography and the curved alignment of the road and valley, as seen in VP2, where the western slope of the Site considerably contains views to the east.
<b>Proposed View</b>	Neither of the 2 potential buildings provided for by the application would be visible from the Taupo Bay Road corridor as it ascends into the settlement from the saddle to the north west. The most noticeable change would relate to removal of the pines from the ridge and the replacement and expansion of that belt of vegetation with a broader planting of native species. Immediate removal of the pines would result in the existing dwelling and a future house on proposed Lot 2 becoming exposed to view from the most elevated portions of the road near the saddle, so the proposed retention of those trees until replacement native plantings have gained adequate scale is necessary to avoid that exposure.
<b>Level of Potential Effects</b>	Positive effects resulting from removal of pines along skyline and replacement with indigenous vegetation.

<b>Viewpoint 3</b>	<b>Upper Bowden Road</b>
<b>Elevation / Distance of Viewpoint from Site</b>	Approximately 30-50metres ASL. Approximately 450 metres from subject site. Refer to Panoramas VP3
<b>Who is Affected?</b>	Residents of Bowden Road and very limited numbers of others using that road.

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland**  
**Assessment of Landscape, Natural Character and  
Visual Effects**



<b>Existing View</b>	A coastal rural vista with tiny glimpses of the inner Bay. The Site occupies a large portion of the view and the belt of pines along the accessway are a prominent element. In the absence of these belts of trees, both the existing lodge building and a future home on proposed Lot 2 would be visible.
<b>Proposed View</b>	From this viewpoint, buildings on both proposed new lots would be visible in the absence of the existing pine belts. The retention of key portions of those trees will allow supplementary native planting to establish as a replacement screening element prior to removal. For less critical segments of the pines, more immediate felling and replacement with native planting will open views to the east, unify vegetation patterns and remove the "sawtooth" effect of the pines. Ultimately, the outcome will prevail across the entire ridge, whilst buildings will be contained within developing native planting.
<b>Level of Potential Effects</b>	As a result of perpetuated screening the progressive replacement of the pines with a native plant composition, the visual effect of the proposal on this audience, is assessed as being entirely positive.

<b>Viewpoint 4</b>	<b>Northern end of Taupo Bay beach</b>
<b>Elevation / Distance of Viewpoint from Site</b>	1-2 metres ASL. 150-500 metres from site Refer to Panorama VP 4.
<b>Who is Affected?</b>	Users of the beach and boats returning near to shoreline.
<b>Existing View</b>	<p>For most users of this area, the focus of attention will be out to sea and along the beach, rather than being landwards towards the Site. That aspect will be experienced most by people returning to shore from swimming and boaties who are coming back from trips to the launch area at this more sheltered end of the beach.</p> <p>When looking inland, the rank of houses along the northern stub of Taupo Beach Road are seen to hug the back of the shore, with native plant cover on the coastal flank of the Site providing a contiguous backdrop that links with the indigenous vegetation that lies inland of the wider settlement.</p> <p>The pines lining the drive create a disharmonious and jagged fringe along the skyline above.</p>
<b>Proposed View</b>	<p>Those on the upper to mid sections of the beach will be entirely obscured from a future building on Lot 2 by vegetation established on the coastal flank below the nominated building area. Cross section A-A', which is deliberately cut through one of the less vegetated historic slip sites, illustrates this situation.</p> <p>From further down the beach around the low tide mark, elements of a building would come into view.</p> <p>Panorama VP4 is captured from the reef at the northern end of the beach and is considered to represent the view of low tide bathers and returning boat users. From this distance offshore the upper half of a building on the Lot 2 envelope would be exposed to view over an extension to its foreground vegetation seen in the cross section and the Concept.</p> <p>The requirement for backdrop earthworks and a solid belt of planting of scale to the immediate west of the building would come particularly into play for this viewing audience and those a little further offshore. Provisions to ensure recessive building characteristics – in terms of height, finish and articulation – would result in very limited contrast between the building and its setting. The existing lodge demonstrates this combination in having a muted presence, but does so less successfully that would arise from the combination of measures applying to proposed Lot 2. As a result, a building on Lot 2 would have a presence in landward views from the lower portions of the intertidal zone and inner CMA, but that exposure would be subtle rather than dominating in a way that would occur in the absence of a backdrop and/or with more conspicuous building characteristics.</p>
<b>Level of Potential Effects</b>	Visual effects would be initially less than minor whilst required framework vegetation develops, transitioning to being nominal over a period of 5 years as that backdrop achieves scale. Removal of the pines and their replacement with indigenous planting will bring a constructive contribution that is considered to more than offset the presence of a Lot 2 building and bring an overall net benefit to natural character and landscape values by unifying the Site more completely with the vegetative themes of the wider Taupo Bay setting.



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland**  
**Assessment of Landscape, Natural Character and  
Visual Effects**



--	--

<b>Viewpoint 5</b>	<b>Southern end of Taupo Bay beach</b>
<b>Elevation / Distance of Viewpoint from Site</b>	1-2 metres ASL. 500- 1100 metres from site Refer to Panorama VP 5.
<b>Who is Affected?</b>	Users of the beach.
<b>Existing View</b>	<p>Whilst the view inland to the west is dominated by the settlement, the view to the north west along the beach is more focussed upon the bush-clad flank and ridge which incorporates the Site. From this viewpoint the bush on the face of the ridge appears more contiguous and less broken. The open area of pasture on the ridge top within proposed Lot 2 does, however, form a moderately conspicuous break in the bush vegetation.</p> <p>The existing large dwelling within the proposed Lot 1 has a surprisingly limited impact within this view, this being so due to the framework of vegetation that it sits within, its recessive colouring and stepped, horizontal form.</p>
<b>Proposed View</b>	<p>Both buildings would be visible from this location. It is anticipated that the building within proposed Lot 2 would be considerably less conspicuous than even the existing building once proposed vegetation begins to establish within 2 years. Initially, both buildings would be viewed collectively, but as the proposed mitigation planting located between the buildings becomes established</p> <p>The building within proposed Lot 2 would just be visible, but only from this southernmost and central portion of the beach. In time, as the existing vegetation develops and becomes taller the visibility of the building will be reduced from the beach. This said, the proposed mitigation measures related to the form and colour of the building will ensure that it is well integrated with its setting. Given time for the mitigation planting to become established, this too will further reduce the prominence of the building and considerably reduce the extent of pasture, unifying the perceived vegetation pattern in the process.</p>
<b>Level of Potential Effects</b>	It is anticipated that the adverse visual effects generated by a building on Lot 2 would initially be minor. As the mitigation planting becomes established the level of these effects will diminish to less than minor.

<b>Viewpoint 6</b>	<b>Taupo Bay settlement</b>
<b>Elevation / Distance of Viewpoint from Site</b>	1-2 metres ASL. 100-750 metres from subject site Refer to Panorama VP 6
<b>Who is Affected?</b>	Occupants of vehicles, pedestrians, occupants of dwellings within the settlement
<b>Existing View</b>	The ridge which includes the subject site forms a minor portion of the backdrop to the settlement since it is seen in the context of the larger hills behind. This said the existing buildings within the proposed Lot 31 and the open pasture area within proposed Lot 2, are visible above and between buildings in the settlement.
<b>Proposed View</b>	<p>A discrete glimpse of a small portion of a future building on proposed Lot 2 would be had from between buildings on the flat and from the upper storey of 2 level homes, but it is likely that a future structure would be difficult to distinguish within this view. A small number of dwellings at the southern end of the settlement may initially be able to see a tiny extent of the edge of the roof of a building on proposed Lot 2, but this appears unlikely.</p> <p>More noticeable from this vantage point would be the removal of pines from the ridgeline and native planting along the spine and around the margins of existing bush.</p>
<b>Level of Potential Effects.</b>	The adverse visual effects resulting from a further building on the application site for this viewer group are considered to be less than minor. Overall, the removal of pines and introduction of broader patterns of native vegetation are predicted to bring a greater overall sense of naturalness to the site in its role as a subtle near to mid range backdrop when seen from this settlement area.

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



<b>Viewpoint 8 and 9</b>	CMA
<b>Elevation / Distance of Viewpoint from Site</b>	1-2 metres ASL. 1000+ metres from Site. Refer to Panoramas VP8 and VP9.
<b>Who is Affected?</b>	Users of boats.
<b>Existing View</b>	<p>Viewers in this location encounter the majority of existing development clustered behind the beach with a backdrop of patchy bush and pasture. This forms a largely continuous swathe extending to the east, whilst to the north the bush cover on the coastal flank and inland hills is less dominant.</p> <p>Some of the development on the ridge occupied by the subject site is visible due to its highly reflective colour. The existing dwelling located within the proposed Lot 1 has very limited visibility due to its recessive presence relative to a wooded setting.</p>
<b>Proposed View</b>	<p>From this distance the viewer will not perceive any significant change in the level of development present on the site.</p> <p>The most noticeable modification initially would be the removal of the “sawtooth” margin of pines running along the property’s skyline, with just a small clump at the northern end of the ridge being retained as a backdrop to the existing dwelling.</p> <p>Over a period of 2-3 years it will be possible to appreciate the reduction in the open areas of pasture and the consolidation of the existing bush as a result of the proposed revegetation. The</p> <p>It is anticipated that a future dwelling within Lot 2 would be discernible if a viewer were to particularly search out its presence, but that the structure would be a very subtle element in this vista due to the distance; the proposed simple, low lying design of the building; its proposed recessive colouring; and a containing framework of existing and proposed vegetation.</p>
<b>Level of Potential Visual Effects</b>	<p>Minor positive visual effects for the proposal as a whole due to the proposed revegetation consolidating the bush backdrop to the settlement and the removal of the majority of the pine avenue that lines the drive along the ridgeline, bringing an emphatic “sawtooth” element.</p> <p>Initially, less than minor adverse visual effects generated as a result of the proposed building within Lot 2, which would be seen as being in very close proximity to what is presently a grassed ridgeline from this perspective. Within a short space of time not exceeding 2 years, these effects would become positive as the planting establishes and a new “vegetated ridgeline” develops as a backdrop to this future building. Replacement of the pines inland of the existing lodge residence will reinforce that positive trend of a longer timeframe.</p> <p>Given the existing modified nature of the site and the level of proposed mitigation it is considered that the potential adverse effects on both the natural character values and natural landscape values, along with adverse visual effects, will be less than minor.</p>

## STATUTORY CONTEXT

Based upon consideration of the weighting to be afforded to the ONL’s identified by the 1995 Far North District Landscape Assessment and the findings of the much more recent landscape assessment that informs the RPS, this analysis will be made on the basis that the Site is not part of an ONL. Accordingly, statutory provisions stemming from s6(b) of the RMA are not addressed and the scope of many of the following provisions have been truncated accordingly. Similarly, the property’s coastal flank vegetation, whilst been deemed to exhibit high natural character values, is not identified as being outstanding in that regard. In adopting this position, those provisions related to ONLs have also been considered and addressed indirectly.



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



The various objectives, policies and rule that are relevant to the proposal in landscape and natural character terms under relevant documents are set out in Appendix Two.

**New Zealand Coastal Policy Statement (NZCPS)**

The configuration of the proposal avoids (yet strengthens) impacting upon the integrity the most natural parts of the Site related to the coastal environment and has been configured to avoid adverse effects upon landscape values. These outcomes have resulted from analysis to distil the character and qualities that define the Site and wider Taupo Bay context of the proposal.

In actively shaping the proposal to respond to existing characteristics, and including components that would restore and extend natural elements in the coastal environment, the relevant objectives of the NZCPS are considered to be appropriately reflected. The intention to covenant those parts of the property that have been identified as having high natural character values serves to safeguard the integrity and functioning of that important component.

In terms of Policy 6, the Lot 2 building envelope is pushed to very near the natural ridge by geotechnical constraints on the slope below. The proposal has been designed to initially shelter a future building within the backdrop created by the pine belt and for that frame to be replaced with indigenous planting laid over a slightly elevated landform to avoid any potential for the “skyline effects” that this policy seeks to avoid. The intention for covenanting and supplementary planting addresses the biological buffering highlighted, whilst the inclusion of Okiore Pa within the covenant area serves to buffer (and protect) that heritage element.

In terms of Policy 11, the covenanting and supplementary planting initiatives address the need for protection of biological diversity, particularly in relation to 13(b)(i).

The natural character preservation thrust of Policy 13 is acknowledged through the protection initiatives already outlined and a combination of measures to ensure that the single additional building that would be provided for is positioned, configured and finished in a manner that minimises its presence and avoids the potential for it to be witnessed as “inappropriate subdivision, use and development”.

Policy 14’s emphasis upon restoring natural character is acknowledged through proposals to actively manage the proposed covenant area, introduced supplementary native vegetation, and – most graphically – to progressively remove the pine belt that currently undermines the natural character of this portion of the coast.

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland**  
**Assessment of Landscape, Natural Character and  
Visual Effects**



The impetus of Policy 15 is largely about identifying and protecting landscapes and features in the coastal environment, but 15(b) directs towards avoidance, remediation or mitigation of adverse effects. The preceding commentary in relation to the NZCPS, and more generally in this report, identifies how this policy would be satisfied.

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

Since much of the RPSN is shaped by the NZCPS, the commentary provided above underpins a response to the provisions of the Policy Statement.

In terms of Objective 3.4, the proposal maintains the extent and diversity of the indigenous ecosystems present - and enhances them - through their retention, formal protection, extension, and management as documented by the application. Objective 3.14 translates from a mix of the Policies of the NZCPS that are mentioned above and is therefore addressed accordingly. That same response applies to Policies 4.4 and 4.6. In terms of subdivision patterns under the latter, the proposal is considered to represent a consolidation around the existing settlement, subtly inserting into a pattern established by the existing lodge on the property, buildings to the immediate north and a scattering of houses associated with Bowden Road, inland.

**Far North District Plan (FNDP)**

Being one of the first district plans to emerge under the RMA and currently being under a process of review and update, the FNDP is presently somewhat out of step with the RPSN. This situation is highlighted by the disparity in landscape mapping outlined earlier. Notwithstanding this circumstance, the policy thrust established by the NZCPS and reflected by the RPSN do flow through the FNDP.

Coastal Environment (CE) objectives seek management that avoids, remedies or mitigate adverse effects of subdivision use and development. Similarly, they seek to preserve, restore, rehabilitate, protect or enhance the natural character of the coastal environment, significant native vegetation and habitats, open space and amenity values of the CE. These matters are addressed through preceding commentary in addressing statutory documents in a tiered fashion, but it is recorded that these FNDP provisions have influenced the shaping of the proposal. This is summarised by the fact that the proposal is considered to comprehensively address the integrated management objectives of 10.3.9., notwithstanding that these provisions are not directly applicable to the format of this application.



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



In a similar fashion, the policies of 10.4, especially 10.4.1, 10.4.2, 10.4.3, 10.4.6, 10.4.8, the component parts of 10.4.12 (which are, effectively, a form of assessment criteria) are addressed by the configuration of the proposal. The preceding commentary and description of the proposal found earlier in this document demonstrate how that will be achieved.

The objectives, policies and rules of the General Coastal Zone maintain themes established by the CE provisions, which in turn emerge largely from earlier versions of the NZCPS and RPSN. Whilst the current editions of these higher-level documents contain many refinements, they maintain the primary thrust of objective and policy of their earlier versions and, as such, they are indirectly addressed through preceding description and commentary.

Much of the thrust of section 12.1, Landscape and Natural Features, is directed toward ONL and ONF. Those that don't have that "outstanding" focus, particularly 12.1.3.3, 12.1.4.8 and 12.1.4.10 are broad in their scope and largely echo provisions that have already been commented upon. The visibility dimension incorporated with 12.1.4.10 is addressed by the tabulated findings earlier in this report, which identified that visual effects will be less than minor.

## **SUMMARY**

A resource consent that provided for subdivision of the Site into three titles lapsed in 2014. The application that is the subject of this assessment, and related material, is founded upon the principles of that earlier proposal, but seeks only a single additional allotment and incorporates a number of refinements to further avoid and minimise potential adverse effects.

Whilst the Site has been identified as part of an outstanding natural landscape by the 1995 Far North District Landscape Assessment, there has since been a recent, updated assessment of the entire Northland Region that has determined that it is not outstanding. Due to the greater currency of the RPS assessment and its alignment to the NZCPS 2010, recent case-law and best practise methodology, the RPS findings are considered to hold greater weight. The vegetated coastal flank of the property has been determined to be an area of High Natural Character under the RPS.

In its position on the northern margin of Taupo Bay, the application site features a number of distinctive characteristics not commonly found in the context of coastal communities elsewhere in the District. It is slightly disconnected from the primary settlement, but still shares a relationship; it has some existing structures, as does the property immediately to the north; the contour is such that a building can be situated just below the ridge whilst not appearing to sit on the brink of the coastal flank; and there is a well established frame of indigenous vegetation that would not be compromised by the subdivision, but offers a cue for extending those vegetative themes.

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



The existing house is of a substantial yet has a relatively muted presence within the coastal landscape when compared with other existing buildings nearby that do not share the same recessive finish characteristics. As such, it is my opinion that the future buildings will have an even less apparent presence within the coastal landscape and would be relatively difficult to distinguish when seen from vantage points within the coastal marine area.

Despite being relatively elevated within the topographic frame of Taupo Bay, the analysis behind this assessment has determined that visual exposure of a new building would be limited. The relationship between the terrain of the site and existing native vegetation on the southern flank - relative to the proposed building envelope - means that a building on proposed Lot 2 would be partially visible from the southern-most portions of Taupo Bay beach and settlement. Moving north along the shore or Marlin Drive, the cutting down of the building platform the adjacent indigenous canopy would progressively screen views to the building.

A planting and vegetation restoration strategy, documented particularly by the pair of concept plans provided, will build upon the existing native vegetation patterns using consistent species mixtures. It will also create a ridgeline corridor and backdrop as part of a wider landscape vegetation pattern within which future buildings would be set.

It is predicted that the stipulated characteristics of the proposed building and planting measures proposed around the building site are such that a future building would, within a relatively short time, be difficult to distinguish on the coastal flank. The sequential removal of the fragmenting pine shelterbelt and replacement with more extensive patterns of indigenous vegetation would ultimately have a positive effect upon the landscape values and natural character of this part of the coast.

The proposal is assessed as being consistent with the statutory expectations of the NZCPS, RPSN and FNDP as they relate to matters of natural character, landscape values and diversity, visual effects and conserving biodiversity. It also responds to measures that aspire to restoration and enhancement.

it is my opinion that the revised proposal - with its even more limited scope of development than a previously consented application, stringent controls over building characteristics and more extensive framework of indigenous vegetation planting and restoration – would result in landscape, visual and natural character effects that would be initially less than minor overall and ultimately insignificant. It is also my conclusion that the intention to replace the pine belt lining the ridgeline would lead to a nett improvement in those values.

Mike Farrow ANZILA Registered Landscape Architect  
**LITTORALIS LANDSCAPE ARCHITECTURE**



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



**APPENDIX ONE**

**Far North District Landscape Assessment Worksheet**

## LANDSCAPE CHARACTER UNITS

## AESTHETIC VALUE

*Field evaluation of Aesthetic Value using the following criteria (with individual ratings):*

- **Vividness**
- How immediately impressive and memorable is the landscape as a result of its visual distinctiveness, diversity or other factors - both compositional and geo-physical?
- **Complexity / Diversity**
- To what extent does the unit have a sense of richness and interest about it arising from the diversity of elements found within it - without that diversity leading to discontinuity?
- **Cohesion**
- Is there a continuity of key statements / patterns / themes / accents that give the landscape both character and a sense of unity?
- **Legibility**
- To what extent is it possible to develop a clear mental image of the unit's landscape because:
  - i) the clear definition of features and patterns within it that emphasise its 3 dimensional structure (layering); and
  - ii) identifiable landmarks (points of focus and reference)?
- **Mystery**
- Does the landscape's spatial structure and array of elements promote a sense of sequence 'enrichment' through the unit's space: the promise of 'more to unfold around the next bend' - beyond the landscape that is immediately visible?

RATING FOR AESTHETIC VALUE (1 - 7, with 7 indicating extremely high value)

*To what extent does the unit reveal and convey a distinctive sense of identity because of:*

- **Endemic Associations**  
Arising from natural elements in the landscape that contribute to the character and sense of place of the locality and Region, eg. the islands of the Hauraki Gulf, remnant Kauri forest
- **Cultural Associations**  
Arising from man-made landscape elements that are distinctive and valued because of their association with both Maori and Pakeha cultures, eg. old pa sites, historic buildings

RATING FOR HERITAGE VALUE (1 - 7, with 7 indicating extremely high value)

LANDSCAPE UNIT IDENTIFICATION

NUMBER:

DESCRIPTION OF LOCATION: W H A V A E C A

NORTH HEAD TO HILL BEACH.

LANDSCAPE CATEGORY: Rocky Coast

### INTERSPERSED WITH BEACHES:

## PHYSICAL ELEMENTS THAT ENHANCE LANDSCAPE CHARACTER & VALUE

CRITICAL ELEMENTS	IMPORTANT ELEMENTS	ELEMENTS THAT CONTRIBUTE TO LANDSCAPE CHARACTER
<b>TOPOGRAPHY:</b>		
- SHARP ROCKY CLIFFS	- PREVALENT HILLSLANDS.	- ROCKY OUTCROPS & REEFS.
- CORRALLED & IDENTIFIED AREAS -	- WALK TRAILLED RIDGES.	
WENT OF CORRAL.	- IDENTIFIED RIDGES	
<b>VEGETATION:</b>		
	- SCATTERED CLADDING OF PACHYRACHA	
	ALONG COASTAL	
	TRAIL.	
	- EXTENSIVE PLANTS OF MANGROVE	
	SHRUBS.	
<b>STRUCTURES:</b>		
<b>WATER BODIES:</b>		
- FRESHWATER		
- SALT-EXPOSED TO		

## PATTERNS & COMPOSITIONAL FACTORS THAT ENHANCE LANDSCAPE CHARACTER & VALUE

CRITICAL TO LANDSCAPE CHARACTER	IMPORTANT IN TERMS OF LANDSCAPE CHARACTER	ELEMENTS THAT CONTRIBUTE TO LANDSCAPE CHARACTER
BROAD LANDSCAPE PATTERNS (EG. BLOCKS OF VEGETATION & OPEN SPACE, LAND & WATER):	- INTERLOCKING FRAMES OF PAVED LAND	
LAND USE LOCATION PATTERNS (EG. TYPICAL SITING OF HOUSES, FARM FORESTRY, PASTURE):	- HOUSES GENERALLY WELL LOCATED IN ENVIRONMENT.	



**To what extent is the unit or key elements within it rare or even unique at the Regional Level**

RATING FOR RARITY (1 - 7, with 7 indicating extremely high value)

**COMPOSITE VALUE RATING** (NB, this rating is not an average - it would be rare to find any one landscape that achieves high ratings for aesthetic value, heritage value and rarity - but it should reflect the particular values found within the individual unit);

1	2	3	4	5	6	7
					✓	

(extremely low) (v. high)

## PART 2. VULNERABILITY TO CHANGE

## VISUAL ABSORPTION CAPABILITY

Field evaluation of VAC using the following criteria to determine the capacity of the unit or view to visually absorb change without significant modification of its character:

- **Land Uses**
- How 'developed' is the existing landscape - from areas that are primarily native and natural to those which are highly developed and urbanised?
- **Vegetation Cover & Type**
- How extensive and varied is existing vegetation cover - from no cover and monocultural dominance to a high level of vegetated cover and diverse species?
- **Topographic Type & Diversity**

Does the unit's terrain assist or limit viewing because of its character and the viewing angles that would typically arise between vantage areas and locations subject to modification - from the simplicity and openness of a plain or shallow ridgeline to incised foot hills with a high level of visual containment?

OVERALL RATING FOR V.A.C. (1 - 7, with 7 indicating extremely low VAC)

© THIS MATRIX IS SUBJECT TO COPYRIGHT  
 & SHALL ONLY BE USED WITH THE EXPRESS  
 PERMISSION OF LA4 LANDSCAPE ARCHITECTS.

**SPATIAL CHARACTERISTICS:**

PRIMINARY RATHER - SOURCE OF	
WITNESS & EXPOSURE ON	
SCENARIOS	
POINTS & CASUAL	
DISSEMINATING	

## ELEMENTS & PATTERNS THAT ADVERSELY AFFECT LANDSCAPE CHARACTER & VALUE

PROMINENT ELEMENTS	NOTICEABLE ELEMENTS
STRUCTURES:	
VEGETATION:	
BROAD LANDSCAPE PATTERNS:	
	- SLIGHTLY SEASONALIZED MIXTURE OF GRASSLAND & INDIGENOUS SHRUB.
PATTERNS OF LAND USE LOCATION:	
- IMPACT OF COASTAL DESERT ELEMENTS	
- FINE SHEPHERDS IN TAINMAN	

## ELEMENTS THAT CONTRIBUTE TO VISUAL ABSORPTION CAPABILITY

ELEMENTS THAT HEIGHTEN VAC:		ELEMENTS THAT REDUCE VAC:	
- EFFECT OF EXISTING PAULST DEVELOPMENT		- SENSITIVITY OF PAULST HEADLANDS, BIODIVERSITY	
- EXPOSURE FOR ROCKERS OF PAULST VEG (LIMITED)		- LIMITED DISTRIBUTION OF EXISTING PAULST DEVELOPMENT	
- ENCLOSURE OF TENTS		- LIMITED EXTENT OF VEGETATION OF A SCALE APPROPRIATE TO GREEN DEVELOPMENT	

### EXPOSURE / VISIBILITY

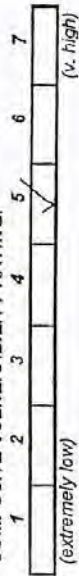
How visually exposed is the unit / sub-unit / view to the likes of:

- Residential Areas
- Areas Of Recreational Use And Tourism Activity
- Public Transport Routes And Tourist Routes
- Commercial Areas

RATING FOR EXPOSURE / VISIBILITY (1 - 7, with 7 indicating extremely high exposure)..

2

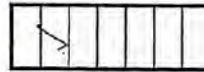
COMPOSITE VULNERABILITY RATING:



AUDIENCES	THEIR RELATIVE SCALE
- RESIDENTS OF CAUSTON	
- FAMILIES	- SMALL
- RECREATIONAL COAST VISITORS	- SMALL
- TRAVELLERS ON LOCAL ROAD	- SMALL
- BOAT PASSENGERS	- SMALL

### OVERALL SENSITIVITY CLASS

(Derived from both the Value and Vulnerability ratings - with an indication of over-riding factors where the final rating is not the average of those for Value and Vulnerability )



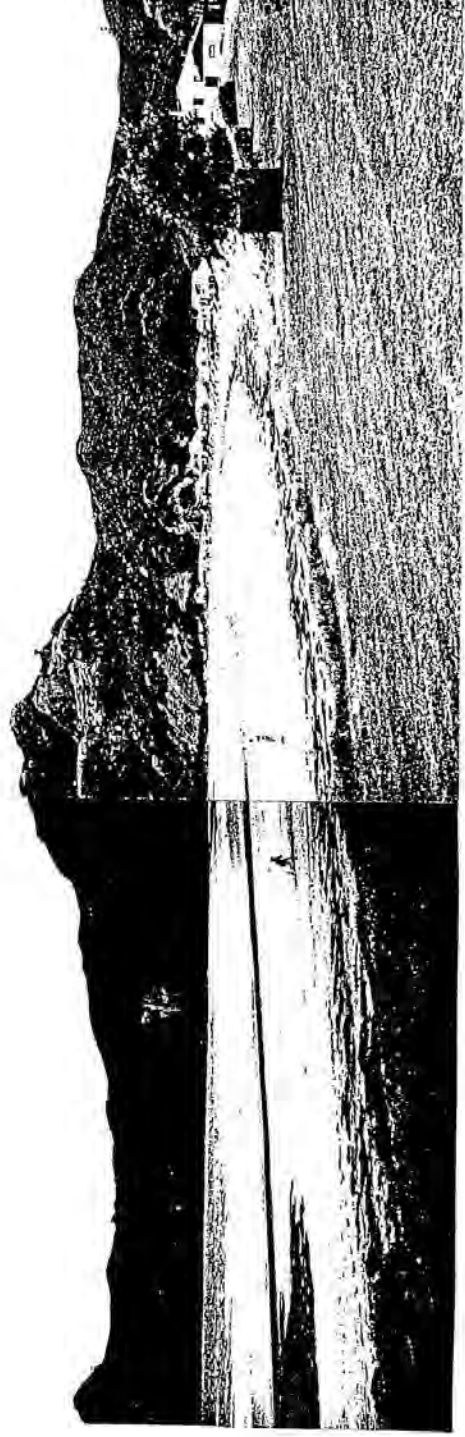
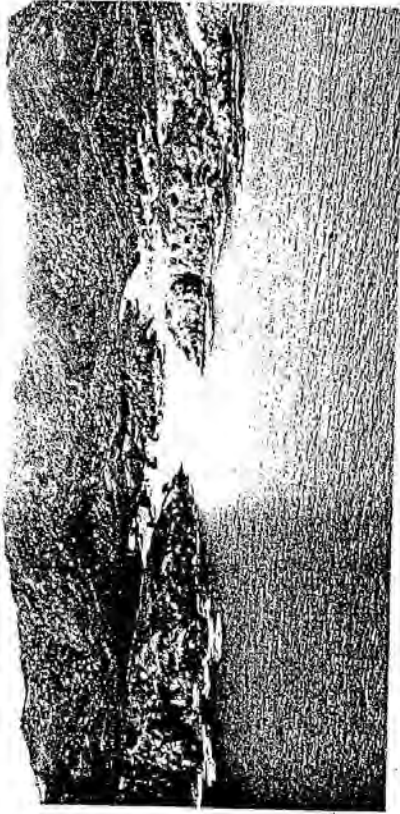
7. EXTREME SENSITIVITY
6. HIGH SENSITIVITY
5. SIGNIFICANT SENSITIVITY
4. MODERATE SENSITIVITY
3. LIMITED SENSITIVITY
2. LOW SENSITIVITY
1. NO / VERY LOW SENSITIVITY

### OVER-RIDING FACTORS

- SMALL COASTAL SETTLEMENTS OF LOW SENSITIVITY - 5

### SUPPLEMENTARY COMMENTS





**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



**APPENDIX TWO**

**Relevant statutory provisions**



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland**  
**Assessment of Landscape, Natural Character and  
Visual Effects**



**New Zealand Coastal Policy Statement**

**Objective 1**

*To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems, including marine and intertidal areas, estuaries, dunes and land, by:*

- *maintaining or enhancing natural biological and physical processes in the coastal environment and recognising their dynamic, complex and interdependent nature;*
- *protecting representative or significant natural ecosystems and sites of biological importance and maintaining the diversity of New Zealand's indigenous coastal flora and fauna; and*
- *maintaining coastal water quality, and enhancing it where it has deteriorated from what would otherwise be its natural condition, with significant adverse effects on ecology and habitat, because of discharges associated with human activity.*

**Objective 2**

*To preserve the natural character of the coastal environment and protect natural features and landscape values through:*

- *recognising the characteristics and qualities that contribute to natural character, natural features and landscape values and their location and distribution;*
- *identifying those areas where various forms of subdivision, use and development would be inappropriate and protecting them from such activities; and*
- *encouraging restoration of the coastal environment.*

**Objective 6 [part]**

*To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:*

- *the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits;*

**Policy 6 Activities in the coastal environment [part]**

*In relation to the coastal environment:*

*(h) consider 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;*

*(i) 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;*

*(j) where appropriate, buffer areas and sites of significant indigenous biological diversity, or historic heritage value.*

**Policy 11 Indigenous biological diversity (biodiversity)**

*To protect indigenous biological diversity in the coastal environment:*

*(a) avoid adverse effects of activities on:*

- (i) indigenous taxa 4 that are listed as threatened 5 or at risk in the New Zealand Threat Classification System lists;*
  - (ii) taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened;*
  - (iii) indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare 6;*
  - (iv) habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare;*
  - (v) areas containing nationally significant examples of indigenous community types; and*
  - (vi) areas set aside for full or partial protection of indigenous biological diversity under other legislation; and*
- (b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on:*
- (i) areas of predominantly indigenous vegetation in the coastal environment;*
  - (ii) habitats in the coastal environment that are important during the vulnerable life stages of indigenous species;*
  - (iii) indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh;*
  - (iv) habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes;*
  - (v) habitats, including areas and routes, important to migratory species; and*
  - (vi) ecological corridors, and areas important for linking or maintaining biological values identified under this policy.*

**Policy 13 Preservation of natural character**

*(1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:*

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



- (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;
- including by:
- (c) assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and:
  - (d) ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies and rules, and include those provisions.
- (2) Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:
- (a) natural elements, processes and patterns;
  - (b) biophysical, ecological, geological and geomorphological aspects;
  - (c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;
  - (d) the natural movement of water and sediment;
  - (e) the natural darkness of the night sky;
  - (f) places or areas that are wild or scenic;
  - (g) a range of natural character from pristine to modified;
  - (h) experiential attributes, including the sounds and smell of the sea; and their context or setting

**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
- (b) providing policies, rules and other methods directed at restoration or rehabilitation in regional policy statements, and plans;
- (c) where practicable, imposing or reviewing restoration or rehabilitation conditions on resource consents and designations, including for the continuation of activities; and recognising that where degraded areas of the coastal environment require restoration or rehabilitation, possible approaches include:
  - (i) restoring indigenous habitats and ecosystems, using local genetic stock where practicable; or
  - (ii) encouraging natural regeneration of indigenous species, recognising the need for effective weed and animal pest management; or
  - (iii) creating or enhancing habitat for indigenous species; or
  - (iv) rehabilitating dunes and other natural coastal features or processes, including saline wetlands and intertidal saltmarsh; or
  - (v) restoring and protecting riparian and intertidal margins; or
  - (vi) reducing or eliminating discharges of contaminants; or
  - (vii) removing redundant structures and materials that have been assessed to have minimal heritage or amenity values and when the removal is authorised by required permits, including an archaeological authority under the Historic Places Act 1993; or
  - (viii) restoring cultural landscape features; or
  - (ix) redesign of structures that interfere with ecosystem processes; or
  - (x) decommissioning or restoring historic landfill and other contaminated sites which are, or have the potential to, leach material into the coastal marine area.

**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:

- (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;

**Regional Policy Statement for Northland**

**Objectives**

**3.4 Indigenous ecosystems and biodiversity**

Safeguard Northland's ecological integrity by:

- a) Protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna;
- b) Maintaining the extent and diversity of indigenous ecosystems and habitats in the region; and
- c) Where practicable, enhancing indigenous ecosystems and habitats, particularly where this contributes to the reduction in the overall threat status of regionally and nationally threatened species.

**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;



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



- (b) The qualities and characteristics that make up outstanding natural features and outstanding natural landscapes;
- (c) The integrity of historic heritage.

**Policies**

**4.4.1 Policy – Maintaining and protecting significant ecological areas and habitats**

- (1) In the coastal environment, avoid adverse effects, and outside the coastal environment avoid, remedy or mitigate adverse effects of subdivision, use and development so they are no more than minor on:
  - (a) Indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists;
  - (b) Areas of indigenous vegetation and habitats of indigenous fauna, that are significant using the assessment criteria in Appendix 5;
  - (c) Areas set aside for full or partial protection of indigenous biodiversity under other legislation.
- (2) In the coastal environment, avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of subdivision, use and development on:
  - (a) Areas of predominantly indigenous vegetation;
  - (b) Habitats of indigenous species that are important for recreational, commercial, traditional or cultural purposes;
  - (c) Indigenous ecosystems and habitats that are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass, northern wet heathlands, coastal and headwater streams, floodplains, margins of the coastal marine area and freshwater bodies, spawning and nursery areas and saltmarsh.
- (3) Outside the coastal environment and where clause (1) does not apply, avoid, remedy or mitigate adverse effects of subdivision, use and development so they are not significant on any of the following:
  - (a) Areas of predominantly indigenous vegetation;
  - (b) Habitats of indigenous species that are important for recreational, commercial, traditional or cultural purposes;
  - (c) Indigenous ecosystems and habitats that are particularly vulnerable to modification, including wetlands, dunelands, northern wet heathlands, headwater streams, floodplains and margins of freshwater bodies, spawning and nursery areas.

**4.6.1 Policy – 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.

**Far North District Plan**

**Coastal Environment**

**10.3 OBJECTIVES**

- 10.3.1 To manage coastal areas in a manner that avoids adverse effects from subdivision, use and development. Where it is not practicable to avoid adverse effects from subdivision use or development, but it is appropriate for the development to proceed, adverse effects of subdivision use or development should be remedied or mitigated.
- 10.3.2 To preserve and, where appropriate in relation to other objectives, to restore, rehabilitate protect, 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).
- 10.3.4 To maintain and enhance public access to and along the coast whilst ensuring that such access does not adversely affect the natural and physical resources of the coastal environment, including Maori cultural values, and public health and safety.

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



**10.4 POLICIES**

- 10.4.1 That the Council only allows appropriate subdivision, use and development in the coastal environment. Appropriate subdivision, use and development is that where the activity generally:
- (a) recognises and provides for those features and elements that contribute to the natural character of an area that may require preservation, restoration or enhancement; and
  - (b) is in a location and of a scale and design that minimises adverse effects on the natural character of the coastal environment; and (c) has adequate services provided in a manner that minimises adverse effects on the coastal environment and does not adversely affect the safety and efficiency of the roading network; and
  - (d) avoids, as far as is practicable, adverse effects which are more than minor on heritage features, outstanding landscapes, cultural values, significant indigenous vegetation and significant habitats of indigenous fauna, amenity values of public land and waters and the natural functions and systems of the coastal environment; and
  - (e) promotes the protection, and where appropriate restoration and enhancement, of areas of significant indigenous vegetation and significant habitats of indigenous fauna; and (f) recognises and provides for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga; and
  - (g) where appropriate, provides for and, where possible, enhances public access to and along the coastal marine area; and (h) gives effect to the New Zealand Coastal Policy Statement and the Regional Policy Statement for Northland.
- 10.4.2 That sprawling or sporadic subdivision and development in the coastal environment be avoided through the consolidation of subdivision and development as far as practicable, within or adjoining built up areas, to the extent that this is consistent with the other objectives and policies of the Plan.
- 10.4.3 That the ecological values of significant coastal indigenous vegetation and significant habitats are maintained in any subdivision, use or development in the coastal environment.
- 10.4.4 That public access to and along the coast be provided, where it is compatible with the preservation of the natural character and amenity, cultural, heritage and spiritual values of the coastal environment, and avoids adverse effects in erosion prone areas.
- 10.4.6 That activities and innovative development including subdivision, which provide superior outcomes and which permanently protect, rehabilitate and/or enhance the natural character of the coastal environment, particularly through the establishment and ongoing management of indigenous coastal vegetation and habitats, will be encouraged by the Council.
- 10.4.12 That the adverse effects of development on the natural character and amenity values of the coastal environment will be minimised through:
- (a) the siting of buildings relative to the skyline, ridges, headlands and natural features; (b) the number of buildings and intensity of development;
  - (c) the colour and reflectivity of buildings;
  - (d) the landscaping (including planting) of the site;
  - (e) the location and design of vehicle access, manoeuvring and parking areas.

**General Coastal Zone**

10.6.3 OBJECTIVES These objectives supplement those set out in Section 10.3.

- 10.6.3.1 To provide for appropriate subdivision, use and development consistent with the need to preserve its natural character.
- 10.6.3.2 To preserve the natural character of the coastal environment and protect it from inappropriate subdivision, use and development.
- 10.6.3.3 To manage the use of natural and physical resources (excluding minerals) in the general coastal area to meet the reasonably foreseeable needs of future generations.

10.6.4 POLICIES These policies supplement those set out in Section 10.4.

- 10.6.4.2 That the visual and landscape qualities of the coastal environment be protected from inappropriate subdivision, use and development.
- 10.6.4.3 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the zone in regards to s6 matters, and shall avoid adverse effects as far as practicable by using techniques including:
- (a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns;



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



- (b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;
- (c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas;
- (e) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests;

10.6.4.4 That controls be imposed to ensure that the potentially adverse effects of activities are avoided, remedied or mitigated as far as practicable.

10.6.4.6 The design, form, location and siting of earthworks shall have regard to the natural character of the landscape including terrain, landforms and indigenous vegetation and shall avoid, remedy or mitigate adverse effects on those features.

**Landscape and Natural Features**

**12.1.3 OBJECTIVES**

12.1.3.3 To recognise and provide for the distinctiveness, natural diversity and complexity of landscapes as far as practicable including the complexity found locally within landscapes and the diversity of landscapes across the District.

**12.1.4 POLICIES**

12.1.4.1 That both positive and adverse effects of development on outstanding natural features and landscapes be taken into account when assessing applications for resource consent.

12.1.4.8 That the trend is towards the enhancement rather than the deterioration of landscape values, including the encouragement of the restoration of degraded landscapes.

12.1.4.10 That landscape values be protected by encouraging development that takes in account:

- (a) the rarity or value of the landscape and/or landscape features;
- (b) the visibility of the development;
- (c) important views as seen from public vantage points on a public road, public reserve, the foreshore and the coastal marine area;
- (d) the desirability of avoiding adverse effects on the elements that contribute to the distinctive character of the coastal landscapes, especially outstanding landscapes and natural features, ridges and headlands or those features that have significant amenity value;
- (e) the contribution of natural patterns, composition and extensive cover of indigenous vegetation to landscape values;

**12.1.7 ASSESSMENT CRITERIA**

The matters set out in s104 and s105, and in Part II of the Act, apply to the consideration of all resource consents for land use activities. In addition to these matters, the Council shall also apply the relevant assessment matters set out below, and will also have regard to the Landscape Assessment report, which was prepared for the Council in 1995 and which contains details of the Outstanding Landscapes, Outstanding Landscape Features and Outstanding Natural Features in the Far North District together with any site specific landscape assessment:

- (a) the rarity of the landscape, landscape features or natural features;
- (e) the extent of visible change to the landscape which may result from an activity;
- (f) the extent to which adverse effects may be mitigated through screening or other means;
- (g) the degree of visual intrusion in the landscape;
- (h) the siting of the activity in relation to ridgelines or natural landscape features;
- (i) the design of any building, structure, landform or any development;
- (j) the location and design of vehicle access, manoeuvring and parking spaces;
- (m) the extent to which the activity may adversely affect ecological values of indigenous flora and fauna;
- (n) provisions for the permanent legal protection of the Outstanding Landscape, Outstanding Landscape Feature or Outstanding Natural Feature;
- (o) the environmental effect of the increase in residential intensity and/or the extra lots in relation to the benefits of achieving permanent legal protection of an Outstanding Landscape, Outstanding Landscape Feature or Outstanding Natural Feature;
- (p) the extent to which an application proposes revegetation and/or enhancement of the Outstanding Landscape, Outstanding Landscape Feature, or Outstanding Natural Feature, and the measures to secure the long term sustainability of the revegetation and/or enhancement;
- (q) the characteristics of the application site, including its size, shape and topography;
- (r) the effectiveness of any proposed pest control programme;
- (s) the relationship of people and communities with outstanding landscapes, outstanding landscape features and outstanding natural features.

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



**APPENDIX THREE**

**Suggested conditions of consent**



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland  
Assessment of Landscape, Natural Character and  
Visual Effects**



**Suggested Conditions of Consent:**

1. *The following mitigation measures will apply to all buildings and structures.*
  - a. *Any buildings with lots 1 and 2 shall be located within the building envelopes shown on the Survey Scheme Plan. No structures shall be built outside of these designated areas.*
  - b. *A building shall not exceed 5.0 metres in height above a finished ground level (FGL) of RL 44.5m. This requirement anticipates that the north east corner of a building that fully utilises the identified building envelope may be over 5m above natural ground level in that area.*
  - c. *A building shall be designed and oriented to run along the contour of the landform, so that the structures are more effectively integrated with the topography,*
  - d. *A building shall be finished in natural materials that will weather to a dark hue, such as timber and dark stone or in colours which have a reflectance value on not more than 30% for roofing and roof fascias and not more than 35% for building facades. This reflectance values shall apply also to powder coated or anodised finishes applied to aluminium joinery.*
  - e. *A building shall be designed so that either:*  
*the rooflines are irregular and stepped with the plan of the dwelling being broken up or indented. This will allow for trees close to the dwelling, create shadows and reduce the appearance of its scale.*  
*or:*  
*the building has a simple, rectangular or square form, a flat roof and eaves not less than 2.400m in depth to eastern and northern elevations to provide shade to building facades in most light conditions. The roof-edge fascia to these elevations shall not exceed 200mm in depth.*
  - f. *Parking and utility areas shall be screened and all cut and fill batters or retaining walls revegetated within the first planting season.*
  - g. *All new accessways shall be constructed so that their surfaces are finished with a visually recessive material such as dark gravel, hotmix or chipseal or concrete with a dark oxide additive.*
  - h. *All new services, including power and phone connections, shall be installed underground.*
  - i. *Garaging and water tanks on all lots are to be incorporated into the building platform, or immediately inland in the case of tanks, with no ancillary structures*
2. *That a detailed landscape plan be prepared by a suitably qualified and experience landscape architect person and be submitted to Council within 3 months of the date of this decision. The plan shall be based upon the Landscape Integration Concept and Detailed Landscape Integration Concept plans (ref 1282\_LIC2500\_20200227 and 1282\_LIC500\_20200227) submitted with the*

**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland**  
**Assessment of Landscape, Natural Character and  
Visual Effects**



*consent application and shall detail planting for the purposes of visual mitigation of all access ways, earthworks and buildings, in addition to achieving the broader scale patterns and linkages demonstrated by the Proposed Mitigation Concept. It shall also make provision for fire resistant native vegetation in close proximity to the building platform. The plan shall use only locally appropriate, eco-sourced species. It shall show the following:*

- a. A summary of the extent and species composition of existing vegetation on the site.*
- b. Names of proposed species.*
- c. Size of proposed stock for planting.*
- d. Locations and spacing of proposed plants, positioned so as to achieve canopy closure within 3-5 years.*
- e. Details of proposed maintenance.*

*The plan shall be to the satisfaction of the Planning Manager of Far North District Council.*

- 3. That the landscape plan approved in condition 2 is to be planted within the first planting season (approximately April – August) directly following the approval of the landscape plan and maintained form that point onwards for a period of 3 years, all to the satisfaction of the Planning Manager.*
- 4. All accessways shall be constructed so that their surfaces are finished with a visually recessive material such as dark gravel, hotmix or chipseal, or concrete with a dark oxide additive.*
- 5. All services, including power and phone connections shall be installed underground.*
- 6. A detailed landscape plan shall be submitted to Council with any building consent application for Lot 2. The plan shall detail planting for the purposes of visual mitigation and integration of buildings, accessways and other modifications to those sites, using predominantly eco-sourced locally appropriate native species. The plan shall show details of re-vegetation of any exposed cut faces associated with the building or access. The plan shall contain the following information:*

- a. Location and extent of any proposed buildings, access and extent of earthworks.*
- b. Size, species and location of existing vegetation.*
- c. Names of proposed species.*
- d. Size of proposed stock for planting.*
- e. Locations and spacing of proposed plants, positioned so as to achieve canopy closure within 3-5 years.*
- f. Details of staking and other means of support for large trees.*
- g. Details of proposed maintenance.*
- h. Details of proposed mulch, type, depth etc..*



**Proposed subdivision by Waikopua Trust,  
Taupo Bay, Northland**  
**Assessment of Landscape, Natural Character and  
Visual Effects**



*The plan shall be to the satisfaction of the Planning Manager.*

- 7. That the landscape plan approved in condition 6 is to be planted within the first planting season following completion of the exterior of the building (approximately April – August) and maintained for a period of 5 years, all to the satisfaction of the Planning Manager.*
- 8. That landowners shall not keep dogs, cats or mustelids on the lots.*
- 9. Any ponds, fences and drains shall be constructed and maintained in a manner that is supportive of kiwi utilising the advice of the Department of Conservation and/or New Zealand Kiwi Foundation and/or advisors on behalf of Aroha Island Trust and/or private ecological consultant/s.*
- 10. That the Landscape Management Guidelines prepared by Littoralis and dated May 2020, be further refined in light of detailed design development and ecological advice – as follows - of the proposal and thereafter become the foundation for ongoing implementation, management and monitoring on a perpetual basis.*
- 11. That, as part of the Landscape Management Guidelines, an integrated ‘weed and animal pest management and monitoring plan’ be prepared by a suitably qualified and experienced person; targeting possums, rats, stoats, cats and other mammalian predators, including monitoring for any future invasions of ecologically threatening pest plants. It shall be submitted to Council and approved to the satisfaction of the Planning Manager. The plan is to detail the methods of ongoing control of all animal pests and weeds that pose a threat to the ecological values of the covenanted areas. It shall include a schedule of the costs of the associated works for the first five years.*

*Alternatively, where a Queen Elizabeth II National Trust Covenant is entered into, the Council shall accept evidence of the covenant agreement that will specify the responsibilities of the landowner and the Trust.*

A landscape photograph of Taupō Bay. In the foreground, the dark blue water of the bay is visible with gentle ripples. In the middle ground, a large, forested hill rises from the shoreline. The hill is covered in dense green trees, with several large, light-colored rock formations protruding from its slopes. At the top of the hill, a prominent, jagged rock peak is visible against the sky. To the right, along the base of the hill, a small cluster of buildings, likely a residential area, can be seen. The sky is a pale, hazy blue with a few wispy clouds. The overall lighting suggests a soft, late afternoon or early morning atmosphere.

# Taupō Bay

*1025 Taupō Bay Road*

03-2025

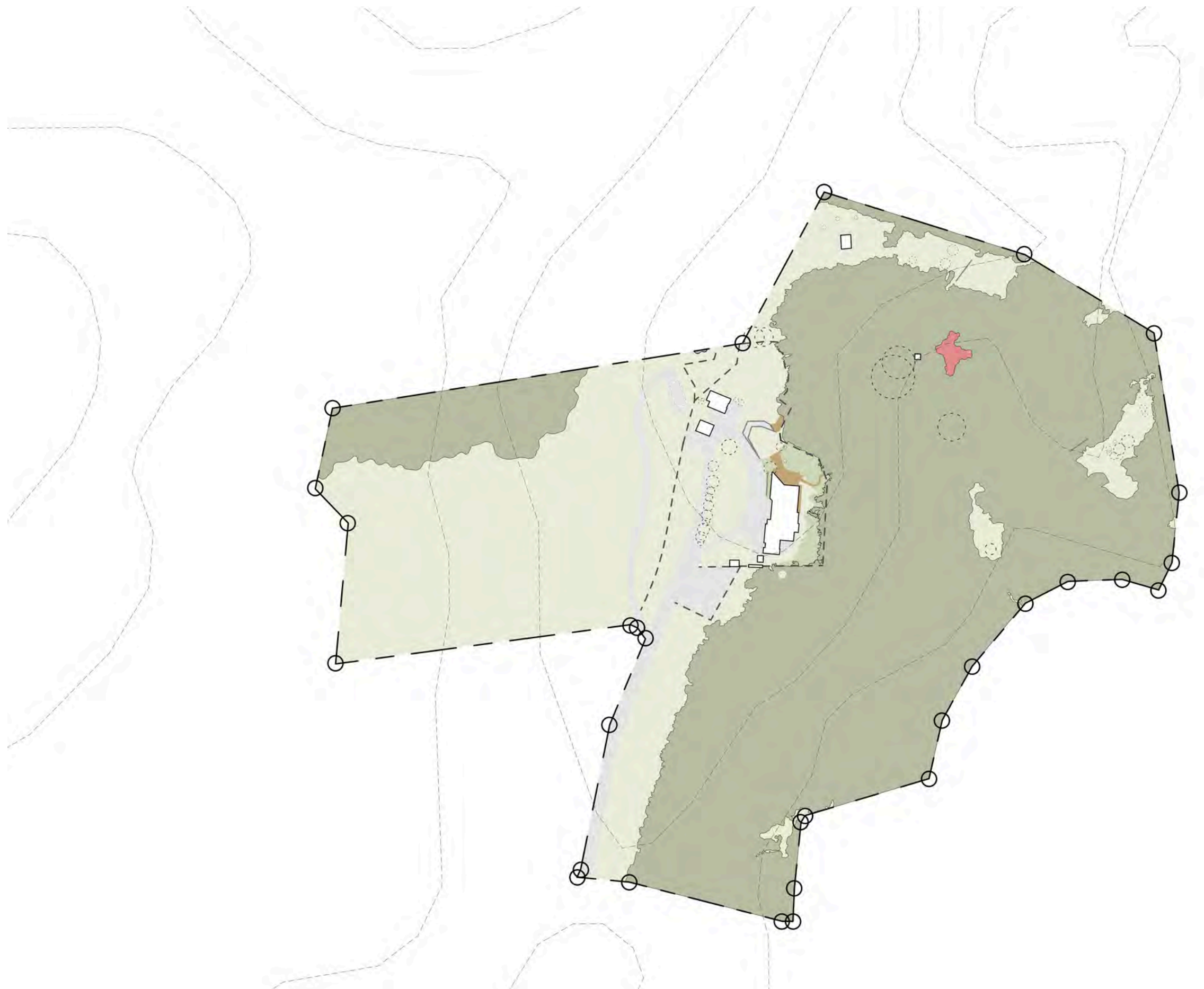
LANDSCAPE LAYOUT - RESOURCE CONSENT

[o2landscapes.com](http://o2landscapes.com)



# Drawing schedule

CODE	REV.	DRAWING	SCALE
Cp01	01	Existing context plan	1:2000
Sp01	01	Existing site plan	1:500
Mlp01	02	Master layout plan	1:2000
Lp01	02	Landscape layout plan	1:500
Plp01	02	Hillside planting plan	1:500
Gi01	01	General installation instructions	NTS
Gi02	01	Planting specification for restoration areas	NTS
Gi03	01	Soil preparation for garden areas	NTS

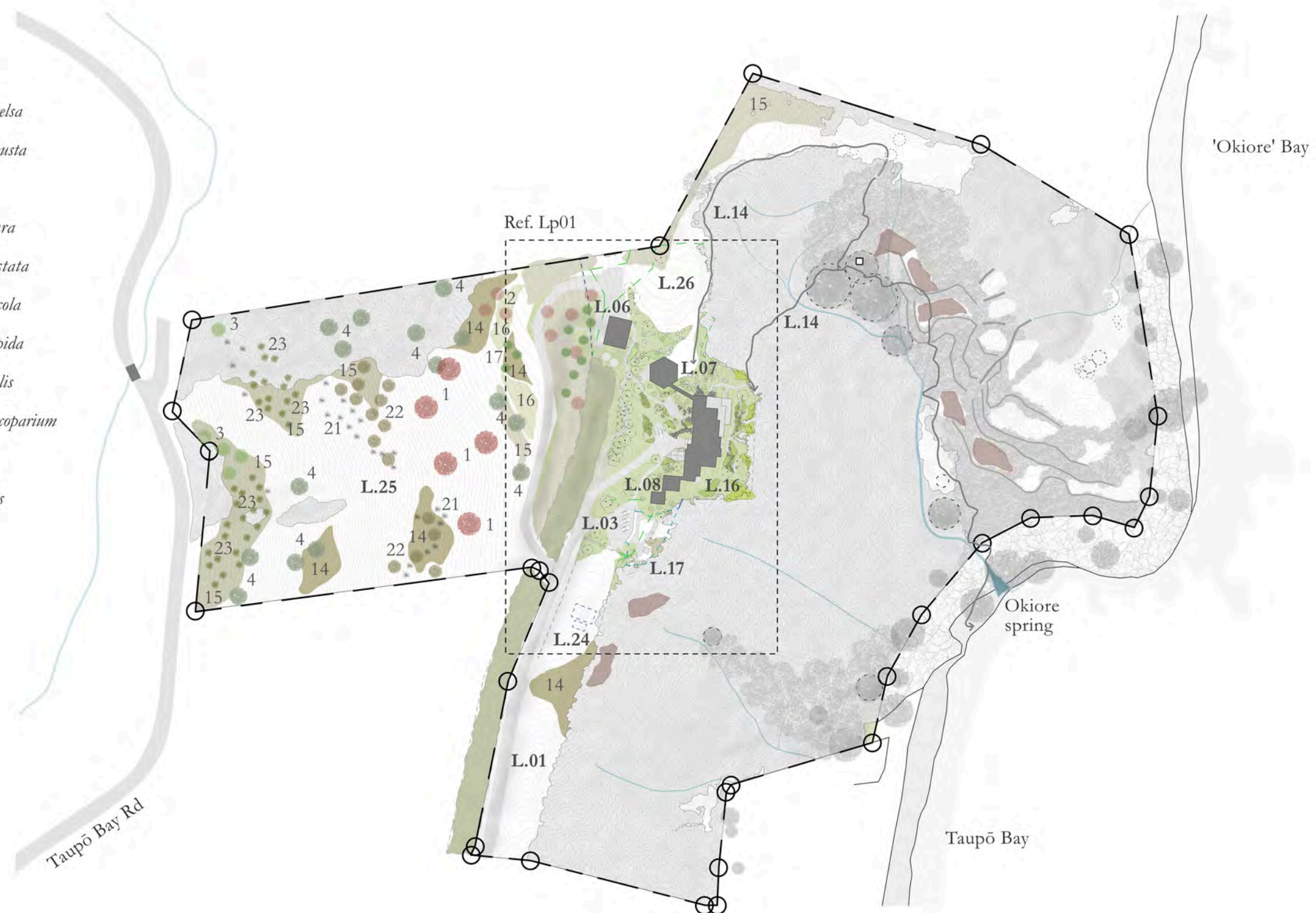






# PLANTING KEY

- 1  *Metrosideros excelsa*
- 2  *Metrosideros robusta*
- 4  *Vitex lucens*
- 22  *Podocarpus totara*
- 17  *Planchonella costata*
- 3  *Pterophylla sylvicola*
- 23  *Rhopalostylis sapida*
- 21  *Cordyline australis*
- 15  *Leptospermum scoparium*
- 14  *Kunzea robusta*
- 16  *Myrsine australis*





---

# Layout specifications for Friedlander, 1025 Taupo Bay Rd

---

O2 Landscapes  
7/03/25  
(0274) 999966

These specifications accompany the layout plan (lp01) for 1025 Taupo Bay Rd. Contractors and subcontractors are to confirm all dimensions and levels on site prior to commencing work.

No.	Item	Dimensions (mm)		Notes
L.01	Existing driveway	4000mm wide		The existing asphalt driveway will finish at the drawn line annd no longer form a loop. L2 continues on from this point through to the house as gravel.
L.02	Gravel driveway and parking	min. 4000mm wide		A proposed gravel driveway leads to house entry and includes a turning bay. Gravel topcoat (15mm deep) over (90mm deep) GAP20 compacted basecourse. The edges of the gravel will merge with the surrounding garden. Gravel topcoat to be selected in consultation with client.
L.03	Guest parking			There is an existing gravelled area within this zone, the outside line of this pre-existing area has been reshaped to a smaller footprint. To be cleaned and top-dressed with gravel to match the proposed gravel driveway. Gravel topcoat (15mm deep) over (90mm deep) GAP20 compacted basecourse. The edges of the gravel will merge with the surrounding garden. Gravel topcoat to be selected in consultation with client.
L.04	Existing gravel track			An existing gravel road runs through the paddock and will be utilised for the proposed garage access.



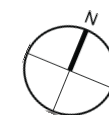
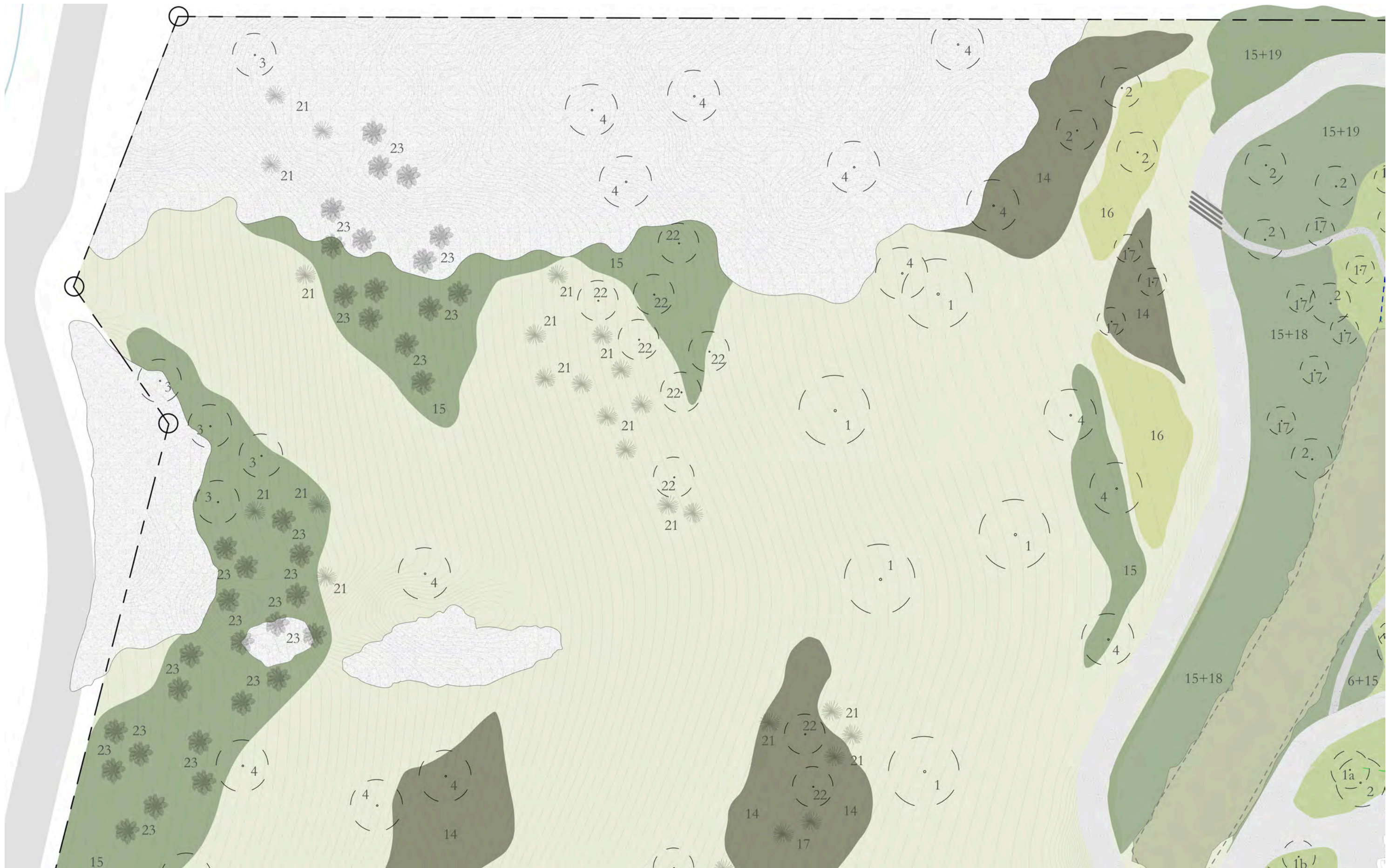












# Plant specifications for Friedlander, 1025 Taupo Bay Rd

O2 Landscapes  
19/12/24  
(0274) 999966

No.	Species/variety	Common Name	Grade	Height (m)	Spread (m)	Quantity	Notes
1	<i>Metrosideros excelsa</i>	Pōhutukawa	PB8	4	4	6	New specimens proposed on western hillside.
1a	<i>Metrosideros excelsa</i> - Existing	Pōhutukawa	N/A	4	4	14	To remain in place.
1b	<i>Metrosideros excelsa</i> - Onsite transplants	Pōhutukawa	Field	4	4	9	Existing windbreaks of pōhutukawa are to be utilised with particular specimens transplanted for a more naturalistic woodland arrangement.
2	<i>Metrosideros robusta</i>	Northern rata	45L	10	5	13	Large specimens of northern rata are proposed where they will screen building additions.
3	<i>Pterophylla sylvicola</i>	Towai	PB8	4	3	10	Towai is a small tree from northern New Zealand that has long racemose flowers and layered branching structure.
3a	<i>Pterophylla sylvicola</i> - Existing	Towai	N/A	4	3	1	A mature specimen sits at the top of a small gully within the existing forest.





11	<i>Vaccinium sp.</i>	Blueberry	PB8	2	0.8	12	A member of the Ericaceae that grows within similarly acidic soils to <i>Pterophylla</i> and <i>Sticherus</i> . An edible species in close proximity to the house.
12	<i>Freyinetia banksii</i>	Kiekie	PB5	Climbing	Spreading	16	A climbing, sword-leaved member of the Pandanus family. Leaves are densely tufted towards stem ends, spirally arranged, producing white flowers in November.
13	<i>Veronica syn. (Hebe) ligustrifolia</i>	Northland Hebe	PB3	2	1	45	A pale-green Hebe species from northern New Zealand. A common component of coastal shrublands. The white flowers are visited frequently by pollinators.
14	<i>Kunzea robusta</i>	Kanuka	RT	5	2.5	400	Areas of existing kanuka forest are to be extended where desirable.
15	<i>Leptospermum scoparium</i>	Manuka	RT	2	1.5	450	Manuka is to be planted in association with the existing kanuka for establishment of nīkau.
16	<i>Myrsine australis</i>	Red māpou	RT	4	2	130	An excellent revegetation species that often occurs as a pioneer species on dry hillsides and road cuttings.
17	<i>Planchonella costata</i>	Tawapou	PB8	5	4	8	Tawāpou is a tree of northern coastlines, that bears dark purple fruits that are attractive to kererū. It has dark-green, pleated leaves, and assumes an upright growth habit.



18	<i>Pomaderris kumeraho</i>	Kūmarahou	PB3	2	1	40	Kūmarahou is native shrub often found on road cuttings and in dry forests. To be planted with manuka below the existing fenced plantings near the new garage.
19	<i>Dacrydium cupressinum</i>	Rimu	PB8	15	4	25	A native podocarp with long, pendulous foliage. To be planted on the western hillside.
20	<i>Coprosma arborea</i>	Māmangi	PB5	4	2	70	This large species of <i>Coprosma</i> is to planted in association with nīkau toward the bottom of the western hillside.
21	<i>Cordyline australis</i>	Cabbage tree	PB5	5	1	50	Generally a lowland species that grows in a variety of conditions. The fruit are the preferred fruit of Kereru. Cabbage trees are to be planted in association with tōtara.
22	<i>Podocarpus totara</i>	Tōtara	PB8	6	6	12	Lowland tōtara is a large native tree that is associated with farmland throughout New Zealand. The fruit are edible (and tasty), and the confluence of where birds and people can find sustenance is interesting.
23	<i>Rhopalostylis sapida</i>	Nīkau	PB8	6	1	33	Nīkau palm occurs naturally in coastal areas. Known for their distinct fronds and green trunk that bears horizontal leaf scars. A preferred fruit of Kereru.



1. *Metrosideros excelsa*



2. *Metrosideros robusta*



3. *Pterophylla sylvicola*



4. *Vitex lucens*





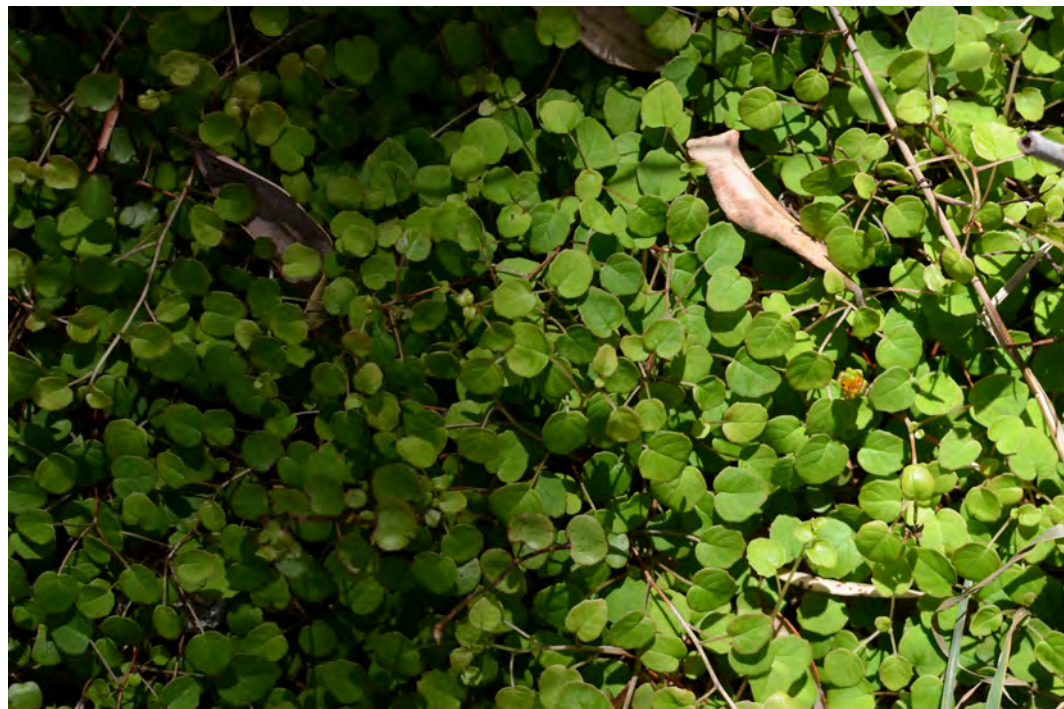
5. *Pseudopanax gilliesii*



6. *Coprosma rigida*



7. *Fuchsia procumbens*



8. Pear 'Seckel'





9. *Sticherus flabellatus*



10. *Pittosporum pimeleoides* subsp. *pimeleoides*



11. Blueberry



12. *Freycinetia banksii*





13. *Veronica* syn.  
(*Hebe*)  
*ligustrifolia*



14. *Kunzea robusta*



15. *Leptospermum*  
*scoparium*



16. *Myrsine australis*





17. *Planchonella*  
*costata*



18. *Pomaderris*  
*kumeraho*



19. *Dacrydium*  
*cupressinum*



20. *Coprosma*  
*arborea*





21. *Cordyline australis*



22. *Podocarpus totara*



23. *Rhopalostylis sapida*



---

# 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	<p>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.</p> <p>Examples of plant names follow: <i>Mazus novaezeelandiae</i> subsp. <i>impolitus</i> f. <i>hirtus</i> <b>Genus:</b> <i>Mazus</i> <b>species:</b> <i>novaezeelandiae</i> <b>subspecies:</b> subsp. <i>impolitus</i> <b>forma:</b> f. <i>hirtus</i> <b>variety:</b> var. <i>hesperia</i> <b>'Cultivar':</b> 'Bearss'</p>
P.2	Plant layout and placement, including spacings	<p>The placement of plants is an integral part of the design and the way 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 stuctures 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.</p>



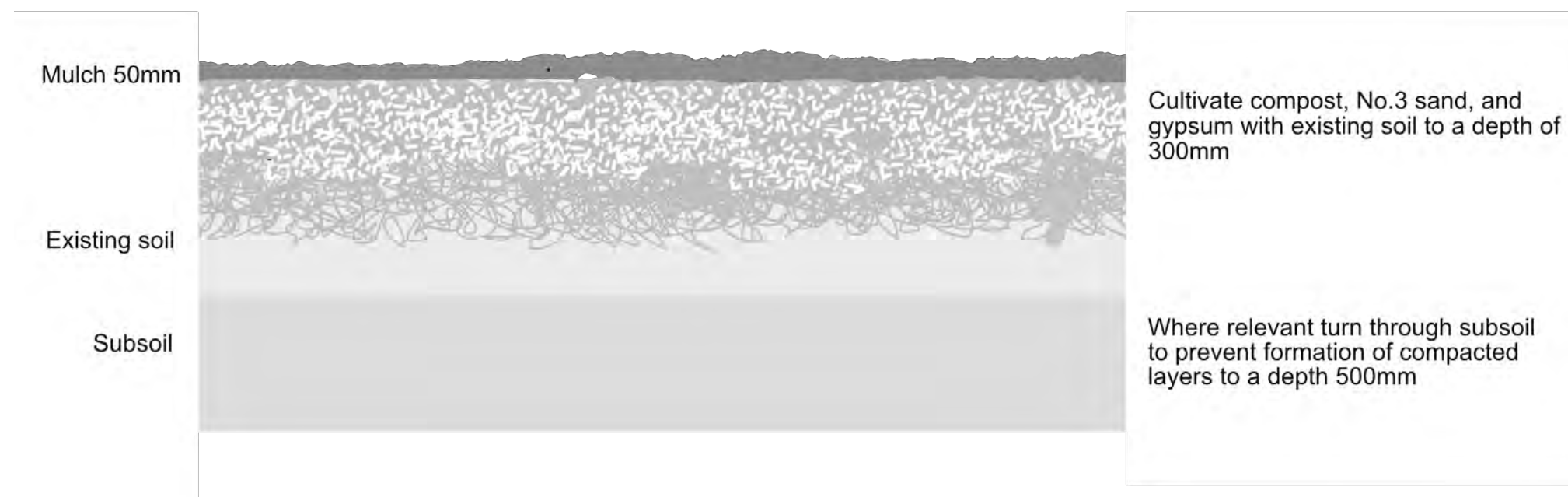
P.3	Planting level	Planting practice is to be undertaken to a high horticultural standard. It is the responsibility of contractors to achieve the correct planting level. Unless stated otherwise, the top of the rootball/base of trunk should be planted 20mm above the finished soil level (allowing for mulch). 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. Mulch should always cover dripline irrigation pipe. If dripline becomes exposed, further mulching will be necessary to hide irrigation lines.
P.5	Staking	It is the responsibility of contractors to ensure 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. Any species that the successful contractor is unable to order at an early stage must be itemised at least 4 months prior.

---

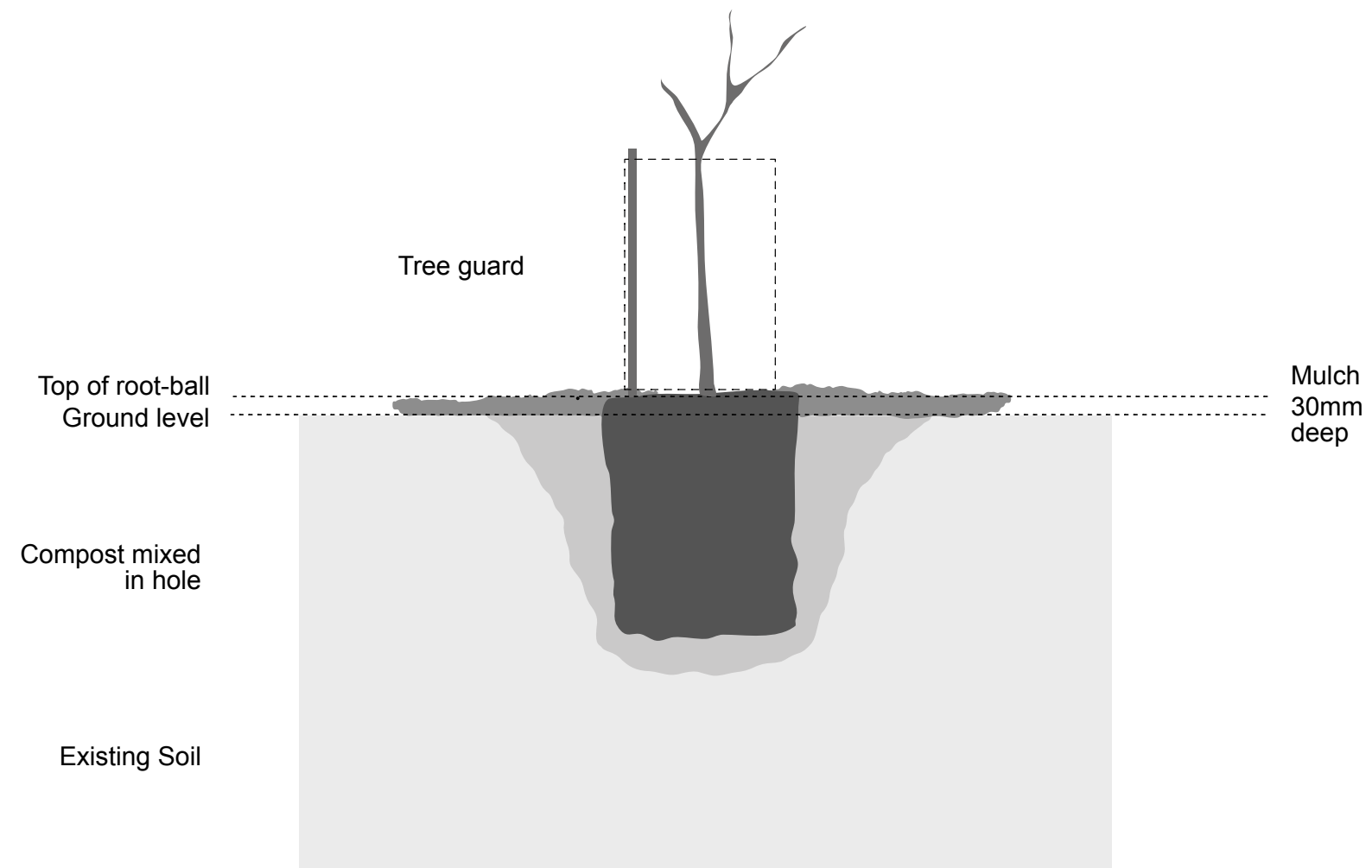
MATERIALS

---

M.1	Finishes	For confirmation of material finishes refer to the layout specifications.
M.2	Hardscape	Concrete, grout and mortar are to be mixed with ratios and materials stated in the layout specifications.









**cook | costello**

## Geotechnical Report

Jason Friendlander c/o Stevens Lawsons Architects

---

1025 Taupo Bay Road

Taupo Bay



Project Number: 107622

Date: 20/03/2025



## DOCUMENT CONTROL RECORD

Client: Jason Friendlander c/o Architects

Project description: Geotechnical Report

Client address: 1025 Taupo Bay Road, Taupo Bay

Date of issue: Thursday, 20 March 2025

Status: Issued

Originators:



Jasmin McVeigh  
**Geologist (Graduate)**  
BSc (Geology)



Tyran Ward  
**Engineering Cadet**

Approved for issue:



PJ Cook  
**Chartered Professional Engineer**  
MACENZ, CMEngNZ, MInstD, CPEng, IntPE (NZ)  
BE (Hons), Dip Ag.

Office of origin: Whangarei

Telephone: 09 438 9529

Contact email: [ccl@coco.co.nz](mailto:ccl@coco.co.nz)

Version	Date	Comment	By
1.0	12 <sup>th</sup> March 2025	For review	JMV
1.0	20 <sup>th</sup> March 2025	Approval	P.Cook

## Table of Contents

1. Executive Summary.....	5
2. Introduction.....	6
2.1. Relevant Documentation .....	6
2.2. The Building Code – B1 Good ground definition .....	7
3. Desktop Study .....	8
3.1. Site Description .....	8
3.2. Proposed Development .....	8
3.3. Published Geology .....	9
3.4. Hazards .....	10
4. Onsite Investigations .....	13
4.1. Site Investigations .....	13
4.2. Site Walkover Observations .....	13
4.3. Hand Auger Investigations .....	13
4.4. Scala Penetrometer Investigations.....	14
4.5. Cone Penetration Test Investigation .....	14
4.6. Water Table .....	15
5. Geotechnical Assessment .....	16
5.1. Site Subsoil Profile .....	16
5.2. Site Subsoil Classification .....	16
5.3. Peak Ground Acceleration.....	16
5.4. Slope Stability Analysis .....	17
5.5. Liquefaction Analysis .....	19
6. Foundation recommendations .....	20
6.1. Expansive Soils .....	20
6.2. Shallow Foundations .....	20
6.3. Pile Foundations.....	21
6.4. Earthworks.....	22
7. Effluent Treatment and Disposal .....	23
7.1. Effluent Tank.....	23
7.2. Secondary treatment .....	24
7.3. Site-Specific Mitigation Measures .....	24
8. Conclusions .....	26
9. Limitations.....	28
Appendix 1: Conceptual plans.....	29
Appendix 2: Site Testing Plan .....	30
Appendix 3: Site Testing Results .....	31
Appendix 4: CPT Results .....	32
Appendix 5: Slope Stability Analysis .....	33
Appendix 6: Effluent Treatment and Disposal .....	34



## List of Tables

Table 1: Summary of Hand Auger results. ....	13
Table 2: Summary of uncorrected ultimate bearing capacities identified at each SP location. ....	14
Table 3: Summary of CPT results. ....	15
Table 4: Subsoil profile based on the shallow soil investigations. ....	16
Table 5: Seismic parameters.....	17
Table 6: Approximate likelihood of failures for different values of factor of safety. ....	17
Table 7: Soil parameters used for slope stability analysis. ....	18
Table 8: Summary of stability results for the proposed development using SLIDE by 'Rocscience'. ....	18
Table 9: soil parameters for pile foundation design. ....	21

## List of Figures

Figure 1: Image displaying approximate site location, extent and proposed extension locations, Northland Regional Council.....	8
Figure 2: Conceptual plans indicating the location of the proposed development.....	9
Figure 3: Size and Extent of the Lot on a 1 m Contour map, QGIS. ....	9
Figure 4: Geology of the site from GNS 1:250000 Geological Map of New Zealand. ....	10
Figure 5: NRC Hazards Map, River Flood extent.....	11
Figure 6: NRC Hazards Map, Coastal Flooding zone (0-4). ....	11
Figure 7: NRC Hazards Map, Tsunami hazard. ....	12

## 1. Executive Summary

### Site Classification:

NZS1170.5	C – Shallow Soil Site
NZ Building Code Expansive Soil Class	H – Highly Expansive Soils

### Groundwater Level:

CPT:	>9.8 mbgl (assumed, GWT not encountered)
------	--

### Bearing Capacity Summary:

Depth to 200kPa Uncorrected Ultimate Bearing Capacity:	1.1 mbgl
Depth to 300kPa Uncorrected Ultimate Bearing Capacity:	1.2 mbgl

### Site Foundation:

Shallow Foundations	Shallow foundations are suitable. Foundations will require specific engineer design for Class H – Highly expansive soils. Foundations can be designed for a UBC of 200 kPa or 300 kPa and founded at a depth of 1.1 m or 1.2 m below the existing ground level, below any topsoil identified across the site, respectively.
Pile Foundations:	Bored or driven pile foundations are recommended for the proposed development. Specific engineer designed (SED) timber piles embedded a minimum of 1.5 mbgl, adhering to NZ Building code B1/VM4. Downslope piles need an embedment of 3.0 m and consider the top 1.0 m of ground embedment for loss of support due to long-term creep. Downslope pile spacing shall be no more than 3.5 times the diameter or 1.2 m, whichever is the lesser.

### Slope Stability Conditions

Slope stability analysis indicates that all scenarios modelled, meet the minimum stability requirements across the building site.
---



## 2. Introduction

Cook Costello has been engaged by Jason Friedlander to provide a Geotechnical Report for use in support of a Building and Resource Consent application with the Far North District Council.

The client plans to expand the existing dwelling by extending the living room and adding two new bedrooms, each with an ensuite. Additionally, the proposed development includes the construction of a single-storey detached garage and a yoga studio.

This report provides information for the extension of the existing dwelling by addition of two bedrooms with ensuite by considering the following aspects:

- Desktop investigation;
- Existing stability of the site;
- Interpretation of test results;
- Effects of the development on stability;
- Suitable building platforms and foundations;

A site testing plan is attached as Appendix 2 showing the property boundary, and associated site investigations within the footprint of the proposed new dwelling.

### 2.1. Relevant Documentation

- AS 2870: 2011 - Construction of residential slabs and footings
- NZS 1170.5:2004 - Structural design actions
- NZS 3604: 2011 - Timber-framed buildings
- NZS 4402:1986 - Methods of testing soils for civil engineering purposes
- New Zealand Build Code B1/VM4
- Northland Regional Council: GIS Maps
- Northland Regional Council Proposed Regional Plan
- Resource Management Act 1991
- Rocscience slide 2
- Far North District Council District Plan
- Far North District Council Engineering Standards and Guidelines
- Cook Costello Geotechnical Report - 1025 Taupo Bay Road, 14<sup>th</sup> July 2020

## 2.2. The Building Code – B1 Good ground definition

The requirement for specific engineer design is dependent on whether or not the site subsoils fall within the NZS3604:2011 definition of 'good ground'. 'Good ground' – means any soil or rock capable of permanently withstanding an ultimate bearing pressure of 300 kPa (i.e. a dependable bearing capacity of 150 kPa using a reduction factor of 0.5) but excludes;

- a) Potentially compressible ground such as topsoil, soft soils such as clay which can be moulded easily in the fingers, and uncompacted loose gravel which contains obvious voids,
- b) Expansive soils being those that have a liquid limit of more than 50% when tested in accordance with NZS4402 Test 2.2 and linear shrinkage of more than 15% when tested from the liquid limit in accordance with NZS 4402 Test 2.6 and,
- c) Any ground which could foreseeably experience a movement of 25 mm or greater for any reason including one or a combination of the following: land instability, ground creep, subsidence, seasonal swelling and shrinking, frost heave, changing groundwater level, erosion, dissolution of soil in water, and effects of tree roots.



### 3. Desktop Study

#### 3.1. Site Description

The property is located at 1025 Taupo Bay Road in Taupo Bay and has the legal description of Lot 1 DP 567902. The property is situated on a ridgeline above Taupo Bay Beach. The property slopes steeply toward the east and south with a vegetated slope. The area surrounding the proposed extensions has a slope of approximately 20°. The proposed building location is mostly covered in grass. To the eastern side of the dwelling, the property is covered with trees. The size and extent of the property along with approximate build location can be seen in Figure 1. The size and extent of the property can be seen in Figure 3 on a 1 m contour map of the property.



Figure 1: Image displaying approximate site location, extent and proposed extension locations, Northland Regional Council.

#### 3.2. Proposed Development

The client has proposed to build an extension to the existing living room, 2 additional bedrooms, a yoga room, and a single-storey detached garage on the property 1025 Taupo Bay Road, Taupo Bay (Lot 1 DP 567902). This report provides information for the development of the bedroom and ensuite extensions. Cook Costello has received conceptual floor plans and scheme plans of the additions which can be seen in Figure 2. Refer to Figure 3 for a contour map displaying the approximate size and extent of the property. The conceptual plans provided by the client has been attached in Appendix 1.



Figure 2: Conceptual plans indicating the location of the proposed development.

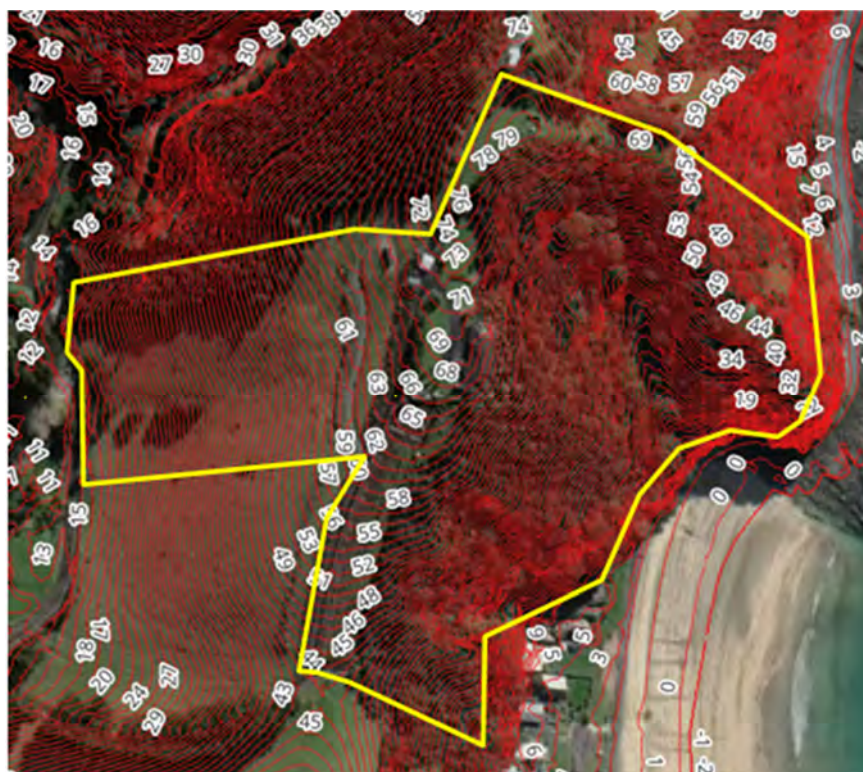


Figure 3: Size and Extent of the Lot on a 1 m Contour map, QGIS.

### 3.3. Published Geology

The 1:250,000 GNS Science online geology map (Figure 4) defines the underlying geology of the site as comprising of Tupou Complex in Northland Allochthon. Tupou Complex is one of the many variations of the Northland Allochthon consisting of strongly indurated, poorly stratified conglomerate, sandstone and argillite. Toward the east at the lower elevations, there is a geological boundary comprising of (Holocene) river deposits & ocean beach deposits of Kariotiahi.



The soil type across the property is mapped on the Northland Regional Council's Soil factsheet viewer as Rangiora clay, clay loam and silty clay loam (RAH). Rangiora loams are mature greywacke soils that can be prone to large-scale slipping. The greywacke basement rock is weathered up to 30 m producing Rangiora loams.

However, these are regionally scaled documents and should not be relied on for site-specific acceptance.



Legend:



-  Tupou Complex in Northland Allochthon
-  Property Boundary
-  Holocene River of Kariotiahi

Figure 4: Geology of the site from GNS 1:250000 Geological Map of New Zealand.

### 3.4. Hazards

Northland Regional Council has mapped 10-, 50-, and 100-year extent river flood surrounding the property (Figure 5). There is also coastal flood hazard zones surrounding the property, which are mapped from zone 0-4 (Figure 6). These zones do not interact with the proposed development. The area of the proposed additions is mapped as tsunami safe area (Figure 7). The western, southern and eastern sides of the property are mapped as a yellow tsunami zone. Slope stability is not mapped by Northland Regional Council. As per engineered judgement, Northland allochthon has a high slope instability potential for  $>18^\circ$ . The property is not mapped with any other natural hazards.



Figure 5: NRC Hazards Map, River Flood extent.

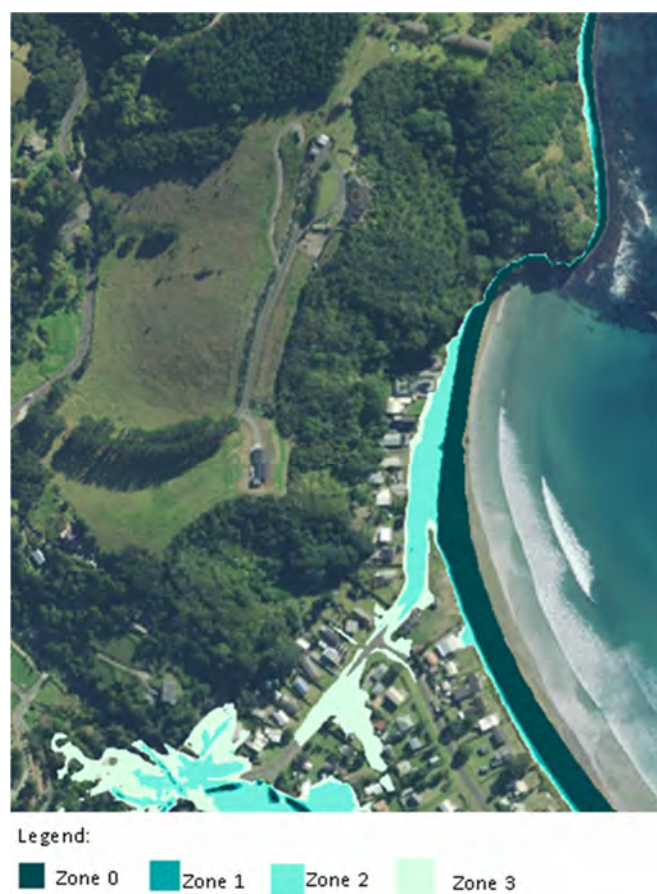


Figure 6: NRC Hazards Map, Coastal Flooding zone (0-4).





Figure 7: NRC Hazards Map, Tsunami hazard.

## 4. Onsite Investigations

### 4.1. Site Investigations

Site investigation was undertaken by Geocivil under the supervision of a Cook Costello Engineer, on 25<sup>th</sup> February and 4<sup>th</sup> March 2025. The following intrusive investigations were conducted at the site:

- 2 No. Hand Augers
- 7 No. Scala Penetrometer
- 1 No. Cone Penetration Test

Test locations can be found in Appendix 2. Detailed results can be found in Appendix 3

### 4.2. Site Walkover Observations

A site walkover was carried out by a Cook Costello Geotechnical Engineer on 20 February 2025. The following observations were noted:

- The proposed build site is accessed from Taupo Bay Road via a steep paved driveway.
- There is a row of large mature pine trees parallel to the driveway.
- The proposed build site is gently sloping towards the south west.
- The site is primarily covered in short grass.
- Some areas on site have longer grass
- There is a range of mature trees across the site
- The soil across the site is dry

### 4.3. Hand Auger Investigations

The results from the hand auger investigations carried out at the site are summarised in Table 1. The location of the tests can be found in Appendix 2. For detailed logs and testing results refer to Appendix 3.

Table 1: Summary of Hand Auger results.

Test ID	Depth (mbgl) <sup>1</sup>	GWL <sup>2</sup> (mbgl)	Test Results		
			(mbgl)	Soil Type	Vane Shear Strength Max/Residual (kPa)
HA03	2.5 (no recovery)	>2.5 (not encountered)	0.0 – 0.3	TOPSOIL	-
			0.3 – 2.1	Silty CLAY	220+ @ 0.5m 220+ @ 1.0m 220+ @ 1.5m 220+ @ 2.0m
			2.1 – 2.5	Clayey SILT	200+ @ 2.5m



Test ID	Depth (mbgl) <sup>1</sup>	GWL <sup>2</sup> (mbgl)	Test Results		
			(mbgl)	Soil Type	Vane Shear Strength Max/Residual (kPa)
HA04	1.5 (Target)	1.5 (not encountered)	0.0 – 1.5	Silty CLAY	UPT @ 0.5 m 220 + @ 1.0 m 220+ @ 1.5m

1. mbgl = Meters below ground level

2. GWL = Groundwater level

#### 4.4. Scala Penetrometer Investigations

Scala penetrometer results show that an ultimate bearing capacity (UBC) is in excess of 200 kPa (100 kPa dependable) from approximately 1.3 m below the existing ground level across the site, below any topsoil. An ultimate bearing capacity is in excess of 300 kPa (150 kPa dependable) from approximately 1.4 m below the existing ground level, below any topsoil. For a summary of the UBC observed across the site refer to Table 2.

Uncorrected bearing capacities derived from Scala penetrometer tests were estimated using the procedure presented by M.J. Stockwell in the paper 'Determination of allowable bearing pressure under small structures (June 1977)'. Bearing capacities should be corrected for the proposed foundation dimensions once these are known.

Table 2: Summary of uncorrected ultimate bearing capacities identified at each SP location.

Test ID	Depth Below Ground (m)	Scala Penetrometer (blows/100mm)	Uncorrected Ultimate Bearing Capacity (kPa)
SP07	0.1	2	>200
	0.1	3	>300
SP08	0.1	2	>200
	0.1	3	>300
SP09	1.3	2	>200
	1.4	3	>300
SP10	0.1	2	>200
	0.1	3	>300
SP11	0.1	2	>200
	0.1	3	>300
SP12	0.1	2	>200
	0.1	3	>300
SP13	0.1	2	>200
	0.1	3	>300

#### 4.5. Cone Penetration Test Investigation

A Cone Penetration Test (CPT) was conducted as a part of the field investigation in order to map the soil profiles and assess soil properties. For more detailed logs and testing results, refer to Appendix 4.

The CPT results were processed and analysed with the specialised software “CPeT-IT” v.3.0.2.1 developed by Geologismiki Ltd. The analytical spreadsheets of the CPT are attached in Appendix 3 and a summary of the results can be found in Table 3.

**Table 3: Summary of CPT results.**

Test ID	Depth (mbgl) <sup>1</sup>	GWL <sup>2</sup> (mbgl)	Test Results		
			Depth (mbgl)	Soil Type	Indicative Cone Tip Resistance, qc (MPa)
CPT01	10.7 (refusal inclination)	>10.8	0.0 – 2.0	CLAY and silty CLAY	2.0
			2.0 – 2.5	CLAY and silty CLAY	3.0
			2.5 – 3.3	CLAY and silty CLAY	1.9
			3.3 – 3.9	CLAY and silty CLAY	3.7
			3.9 - 5.0	CLAY and Silty CLAY	5.3
			5.0 - 6.3	Very dense/stiff soil	8.1
			6.3 - 7.1	CLAY	4.4
			7.1 - 8.0	CLAY	5.8
			8.0 - 8.7	CLAY and silty CLAY	10.4
			8.7 - 9.4	CLAY	6.0
			9.4 - 10.5	CLAY and silty CLAY	10.5
			10.5 - 10.8	Very dense/stiff soil	13.6

1. mbgl = meters below ground level
2. GWL = groundwater level

#### 4.6. Water Table

The groundwater table was not encountered during the CPT which extends to a maximum depth of 10.8 mbgl. Due to season changes to groundwater, the groundwater table would be >9.8mbgl in the wetter seasons.



## 5. Geotechnical Assessment

### 5.1. Site Subsoil Profile

The subsoil profile for the proposed building platform is dominated by CLAY. For a basic geological interpretation based on shallow geotechnical investigations refer to Table 4.

Table 4: Subsoil profile based on the shallow soil investigations.

Depth Ranges (mbgl)	Geological Interpretation
0.0 – 0.2	Soft TOPSOIL
0.2 – 3.3	Firm Silty CLAY and CLAY
3.3 – 5.0	Stiff CLAY and Silty CLAY
5.0 – 10.5	Very stiff CLAY and Hard silty CLAY interbedded
10.5+	Inferred Moderately Weathered Northland Allochthon

### 5.2. Site Subsoil Classification

The general soils encountered across the site are consistent with the site subsoil classification Class C – Shallow Soil sites as per NZS1170.5 -2005.

### 5.3. Peak Ground Acceleration

Peak Ground acceleration (PGA) of 0.19 and an earthquake magnitude of 6.5 for a 500-year return period has been adopted in accordance with MBIE/NZGS Module 1 (2021).

The PGA may be affected considering the topographic amplification factor  $A_{topo}$  according to the following situations, as illustrated in NZGS – Module 6. Ground shaking may be significantly amplified by certain topographic features including long ridges and cliff tops. The phenomenon of topographic amplification is well recognised internationally, and the following simplified recommendations have been adapted from Eurocode 8, Part 5: BS EN 1998-5: 2004 (Annex A). Amplification factors are provided below with respect to the topographic situation.

For cliff features >30m in height,  $A_{topo} = 1.2$  at the cliff edge and the area on top of the cliff of width equal to the height of the cliff;

For ridge lines >30m in height with crest width significantly less than base width, and average slope angle greater than  $30^\circ$ ,  $A_{topo} = 1.4$  at the crest diminishing to unity at the base;

For ridge lines >30m in height with crest width significantly less than base width, and average slope angle greater than  $15^\circ$  and less than  $30^\circ$ ,  $A_{topo} = 1.2$  at the crest diminishing to unity at the base;

For average slope angles of less than 15 degrees,  $A_{topo} = 1.0$

The last parameter which shall be taken into consideration is the displacement factor, which reduces the PGA and depends on the amount of permanent displacement that can be tolerated for the particular design case. PGA is considered overly conservative in most cases for pseudo-static analyses in the

slope stability and retaining wall design (e.g. Kramer, 1996). Therefore, international practice is to reduce PGA by a factor from 0.33 to 0.5.

In this specific case, we can consider the following parameters:

$W_d = 0.5$  (Case 3 from NZGS Guidelines Module 6)

$A_{topo} = 1.2$  (average slope angle between 15° and 30° degrees)

The relationships to calculate the seismic design parameters are given below.

$$K_h = PGA/g \times A_{topo} \times W_d = 0.19 \times 1.2 \times 0.5 = 0.114$$

The seismic parameters are summarised in Table 5.

Table 5: Seismic parameters.

Limit State	Displacement Factor $W_d$	Topographic Amplification Factor, $A_{topo}$	Peak Ground Acceleration, PGA or C(T)	Horizontal Acceleration Coefficient, $K_h$
ULS <sup>1</sup>	0.5	1.2	0.19	0.114

1. Ultimate Limit State

#### 5.4. Slope Stability Analysis

The risk of slope failure is determined by the Factor of Safety and is derived by the ratio of stabilising forces to destabilising forces. The criteria of an acceptable slope will generally have a factor of safety of 1.2 to 1.5, having a normal factor value of 1.5 for residential construction. These factors of safety have been developed by geotechnical engineers to accommodate uncertainties in geometric accuracy, rock properties, analysis method, and the validity of assumptions made.

It is important to note that the modelled factor of safety does not assure safety from instability or slope movement but indicates a reduced risk of failure. Table 6 shows the approximate likelihood of failures for different values of factors of safety.

Table 6: Approximate likelihood of failures for different values of factor of safety.

Factor of Safety (FOS)	Likelihood of Failure Per Annum
1.1	1:10
1.3	1:50
1.5	1:200
1.7	1:1000

Generally, the higher the risk category for the asset under consideration, the higher the design FOS to be adopted. The Building Research Association of New Zealand (BRANZ) has completed two quantitative study reports (SR004 and SR083) on slope stability at potential building sites. It is from these reports that we have adapted our methodology for slope stability analysis.



The likelihood of slope failure was modelled using the software “SLIDE” by Rocscience. The analyses have been performed on one cross-section (refer to Appendix 5 ). The cross-section shows the worst-case section of the proposed subdivision in terms of slope stability.

We have modelled three separate scenarios for the cross-section:

- Normal groundwater conditions;
- Raised groundwater conditions using a Ru value of 0.3;
- Seismic conditions (ULS) as per NZS1170.5:2004 & Module 1 NZGS 2016.

For all scenarios modelled, we assessed potential non-circular failure surfaces. A distributed load of 10 kPa has been assumed to model the induced surcharge resulting from the proposed dwelling. The parameters used for slope stability are presented in Table 7.

**Table 7: Soil parameters used for slope stability analysis.**

Soil Type	Depth ranges <sup>1</sup> (m)	Density (γ) kN/m <sup>3</sup>	Effective Cohesion (c') kPa	Effective Friction Angle (φ') deg.
Firm silty CLAY	0 - 3.4	17	3	23
Stiff silty CLAY	3.4 - 5.0	18	4	28
Hard CLAY	5.0 - 6.3	19	6	32
Very stiff CLAY	6.3 - 8.0	18.5	5	30
Hard silty CLAY	8.0 - 8.7	19	8	32
Very stiff CLAY	8.7 - 9.4	18.5	5	30
Hard silty CLAY	9.4- 10.5	19.5	10	32
Moderately Weathered Northland Allochthon	>10.5	20	10	30

1. The soil layers and respective depths have been inferred from CPT01

Geotechnical design parameters have been determined based upon the in-situ test data from sites surrounding the property, site inspection, and knowledge of the local geology. Conservative estimations of some parameters have been made where available data is lacking.

A summary of the factor of safety results from the analysis is presented in Table 8. For detailed results, please refer to Appendix 5.

**Table 8: Summary of stability results for the proposed development using SLIDE by ‘Rocscience’.**

Cross Section	Assumed surface model	Static current groundwater conditions	Assumed ‘raised’ groundwater conditions	Seismic loading <sup>1</sup>
A – A'	Non-circular	1.7	1.7	1.3
Required	Non-circular	1.5	1.3	1.2

1. An undrained analysis has been performed for the seismic case.

As shown in Table 8, satisfactory factors of safety were obtained across all modelled scenarios.

### 5.5. Liquefaction Analysis

The investigation indicates that no water table was encountered in CPT01 up to a depth of 10.7 m at the time of testing. Since liquefaction occurs only in saturated soils, any soil layer above the water table can be classified as 'non-susceptible to liquefaction.'

Additionally, the fines content in the soil layers exceeds 35%, suggesting that cohesive soil properties dominate their behavior. The soil is classified as CLAY/silty CLAY with a relatively high plasticity index, further reducing the likelihood of liquefaction. Based on these factors, it can be concluded that the site is not susceptible to liquefaction.



## 6. Foundation recommendations

### 6.1. Expansive Soils

Many of the soils located within the Northland region are considered to be expansive soils. There are three basic types of soil naturally occurring in the Northland Area: sand, silt, and clay. Clay soils are generally classified as "expansive". This means that a given amount of clay will tend to expand (increase in volume) as it absorbs water and it will shrink (lessen in volume) as water is drawn away. The action of seasonal shrink/swell of soils can have a significant impact on the foundations of structures and also on other components of developments such as services, claddings, windows, doors, roading, etc. It is evident from historical reports and site inspections that the effect of expansive soils is a major problem in Northland.

Laboratory tests were conducted as part of the Cook Costello Geotechnical Report for 1025 Taupo Bay Road, dated 14th July 2020. These test results have been referenced in the current assessment, as the site's geology remains consistent with the previous investigation. The laboratory findings indicate that the site is classified as H (highly expansive), suggesting a high potential for shrink-swell effects. Therefore, it is considered that the building site does not meet the requirements for "Good Ground" as defined in the New Zealand Building Code and standard NZS3604 foundations are not suitable for this site. Foundations will require engineering design in accordance with NZ Building Code for class 'H' soils (Highly Expansive Soils). Specific design for expansive soils has to be taken into account in the foundation design.

We, therefore, consider that the site should be classified as Class H in terms of New Zealand Building Code B1/AS1 (Amendment 19). Foundations should be designed in accordance with NZ Building Code – B1 for a characteristic surface movement of 78 mm.

### 6.2. Shallow Foundations

Shallow foundations are suitable for the proposed building site. Shallow foundations can only be implemented if a flat building platform is constructed prior to shallow foundation installation.

Scala penetrometer results show that an Ultimate Bearing Capacity (UBC) in excess of 200 kPa (100 kPa dependable) is available from approximately 1.1 m below the existing ground level, below any topsoil or fill. An UBC is in excess of 300 kPa (150 kPa dependable) from approximately 1.2 m below the existing ground level, below any topsoil or fill.

Therefore, shallow foundations can be designed for a UBC of 200 kPa or 300 kPa if founded at 1.1 m or 1.2 m below the existing ground level, below any topsoil across the site respectively. Earthworks in the form of local undercut would be required to achieve the required founding levels, if it is desired to maintain the existing ground level, the undercut could be backfilled with compacted hardfill.

In order to mitigate the effects of expansive soils for a slab foundation, we recommend designing a stiffened concrete slab (e.g. RibRaft) specifically designed (SED) in accordance with AS2870 and NZ Building Code Clause B1 Class 'H' soils for a characteristic surface movement of 78 mm. Further design will be needed at the detailed design stage.

### 6.3. Pile Foundations

Specifically designed bored or driven pile foundations are suitable and recommended for the proposed development.

In order to mitigate the effects of expansive soils, we recommend designing the piles to be embedded a minimum of 1.5 m below the existing ground level, below any topsoil. At this depth, it is considered to be below the effects of seasonal moisture variations that cause the expansive soils to shrink and swell, inducing uplift forces on the piles.

For shaft capacity and lateral capacity of piles, the upper 0.75 mbgl should not be relied upon to provide any resistance due to the presence of expansive soils.

Downslope piles need an embedment of at least 3.0 m and consider the top 1.0 m of ground embedment for loss of support due to long-term creep. Downslope pile spacing shall be no more than 3.5 times the diameter or 1.2 m, whichever is the lesser.

Piled foundation design should be carried out in accordance with NZ Building Code B1/VM4. Pile design is to be carried out by a suitably qualified engineer utilising the parameters in Table 9.

Table 9: soil parameters for pile foundation design.

Soil Type	Depths (m)	Unit weight, $\gamma$ (kN/m <sup>3</sup> )	Effective Cohesion, $c'$ (kPa)	Effective Angle of internal friction, $\phi'$ (°)	Undrained Shear Strength, $C_u$ (kPa)	Skin Friction <sup>1</sup> (kPa)	Skin friction <sup>2</sup> (kPa)
Firm silty CLAY	0 - 3.4	17	3	23	50	35	40
Stiff silty CLAY	3.4 - 5.0	18	4	28	75	45	45
Hard CLAY	5.0 - 6.3	19	6	32	150	60	37
Very stiff CLAY	6.3 - 8.0	18.5	5	30	130	58	39
Hard silty CLAY	8.0 - 8.7	19	8	32	150	60	37
Very stiff CLAY	8.7 - 9.4	18.5	5	30	130	58	39
Hard silty CLAY	9.4- 10.5	19.5	10	32	200	80	50
Moderately Weathered Northland Allochthon	>10.5	20	10	30	100	50	40

1. Skin Friction for bored piles

2. Skin Friction for driven piles



#### 6.4. Earthworks

Any earthworks conducted at the site should be undertaken and tested in accordance with NZS4431:2022

- All engineered or structural hardfill should be placed in  $\leq 200$  mm lifts and be compacted to a minimum of 95% of maximum dry density, at no less than optimum moisture content. Compaction should be achieved using standard plant and methodology suitable for the imported material. A water source should be maintained on-site for moisture control. The fill must be tested and certified in accordance with NZS4431 if the thickness exceeds 300 mm and monitored by a suitably qualified engineer. Fill may be battered down to the natural ground at a maximum grade of 2H to 1V if possible. Alternatively, any compacted fill on-site should be retained by retaining structures.
- Wherever filling or soft native ground is present at foundation level it should be undercut and replaced with approved compacted hardfill. Its suitability or otherwise as a bearing material beneath the floor slab should be determined on-site by the Engineer.
- Compacted hard FILL beneath the building platform exceeding a depth of 300 mm will require testing and certification by a suitably qualified engineer.
- Compacted fill will require compaction testing every 600 mm lift.
- All temporary cuts during the construction phase should have an angle of no greater than 2H:1V
- Where site-won fill is proposed to be used as hard FILL material, this material must be approved for use by a suitably qualified geotechnical engineer.

It is recommended that a geotechnical engineer is on-site during excavation to confirm subsurface material and ensure that ground conditions are as per Cook Costello's geotechnical report. We would be in a position to comment if the ground conditions varied from those described in this report.

## 7. Effluent Treatment and Disposal

The design of the effluent treatment and disposal system for the proposed development is in accordance with the standard AS/NZS 1547:2012 for onsite domestic wastewater management. Effluent disposal design calculations are attached as Appendix 6. A minimum reserve area of 30% for the application of secondary treated wastewater and 100% for the application of primary treated wastewater is required by the Northland Regional Council Water and Soil Plan.

The proposed dwellings will be serviced by roof water supply, and it is assumed that standard water reduction fixtures will be in use, resulting in a daily flow rate of 145 L/person/day. If the water supply is to be serviced without reduction fixtures, the daily flow rate is 180 L/person/day, and the disposal field sizing given below should be adjusted accordingly. Based on the provided plans, a 2-bedroom extension to the dwelling is considered for design purposes. The design occupancy for a 2-bedroom dwelling is 4 persons, giving a design daily flow rate (Q) of 580 L/day for disposal system treatment.

Using the soil characteristics identified during site investigations; a Soil Category 5 – Light clay's, moderately structured, has been used for design purposes. This is supported by hand auger investigations undertaken as part of shallow geotechnical investigations.

An AES system is to be used on-site, this requires the construction of a 300 mm deep cutoff drain upslope to divert surface runoff away from the disposal field.

### 7.1. Effluent Tank

For the effluent tank capacity with a 5-year desludging period the sizing is as follows:

$$24\text{-hour storage volume} = 4 \text{ people} \times 145 \text{ L/person/day} = 580 \text{ L}$$

$$24\text{-hour storage volume above the high-water level} = 580 \text{ L}$$

$$5 \text{ years of sludge accumulation at } 80 \text{ L/person/year} = 4 \times 80 \times 5 = 1600 \text{ L}$$

Tank capacity of 2760 L is suitable.

Therefore, the minimum effluent tank capacity should be 2760 L.



## 7.2. Secondary treatment

Secondary effluent treatment will be via an on-site Advanced Enviro-Septic™ (AES) secondary treatment system with disposal via perforations in the AES pipes into the AES sand bed.

Design calculations have been made using a secondary treated area loading rate of 10 mm/day. A total field area of 58 m<sup>2</sup> is required for the placement of the AES system pipes and sand bed.

$$Q = 145 \text{ litres/person/day} \times 4 \text{ persons} = 580 \text{ litres/day}$$

$$\text{DLR} = 10 \text{ mm/day}$$

$$A = 580 \text{ litres/day} / 10 \text{ mm/day} = 58 \text{ m}^2.$$

Effluent field sizing calculations for the AES beds, along with a site plan indicating the location and configuration of the field is attached as Appendix 6. The AES pipes are to be placed on top of the AES system sand bed, which is to be a minimum of 300 mm thick. A layer of AES system sand (minimum 150 mm thick) must be placed on top of the AES pipes. The surface should then be topsoiled (minimum of 150 mm thick), giving the AES pipes a minimum cover of 300 mm. The AES system requires a low-level air inlet and a high-level air outlet, the high-level air outlet is required to be 3.0 m above the low-level air inlet.

The sand to be used must comply with AES system sand requirements, such as a coarse, clean, or washed sand with less than 2% silt passing a #200 sieve.

There is a sufficient area within the section to adequately construct the proposed disposal field. Indicative locations and preliminary calculations can be found in Appendix 6. The system shall be constructed by a registered drainlayer and certified AES installer.

Calculations and sizing of effluent disposal fields consider a 2-bedroom dwelling. Should the future dwelling have more or less than two bedrooms, then effluent disposal calculations will need to be revised.

There is adequate clearance to groundwater of >0.6m for secondary treatment in accordance with the Regional Water and Soil Plan.

No groundwater bores are indicated in the vicinity of the disposal fields, the closest recorded active bore is approximately 160 m to the southeast of the property.

## 7.3. Site-Specific Mitigation Measures

The recommended location for the effluent disposal field is shown indicatively on the site plan attached in Appendix 6. Specific mitigation measures are recommended for on-site wastewater systems utilising a primary treatment system, as detailed above, should adhere to the following recommendations:

1. The system shall be constructed by a registered drainlayer.

2. The effluent disposal system is to be built in accordance with ASNZS 1547 – 2012.
3. There is adequate clearance to groundwater of >0.6 m for secondary treatment in accordance with the Regional Water and Soil Plan.
4. A reserve area of 30% is to be set aside for the future extension of the land application area in accordance with NRC RWSP.
5. The rainwater spreader and the accompanying effluent disposal field shall have a minimum separation distance of 5 m from all watercourses.
6. The effluent disposal field shall have a minimum separation distance of 3 m from buildings (ideally >6 m) and 1.5 m from property boundaries.
7. Cutoff drains will be needed upslope of the disposal fields to divert surface runoff away from the effluent field.
8. The inlet and outlet of the septic tank shall be provided with either sliding joints or one meter of corrugated flexible piping either side of the septic tank in order to allow some ground movement to occur without breaking the pipe. The septic tank end of the corrugated pipe must be keyed into the tank wall.
9. Pre-commissioning tests outlined in ASNZS 1547 – 2012 should be performed after the installation of all on-site components and prior to covering the effluent distribution system.
10. A suitable maintenance agreement should be entered with a suitably qualified drain layer to ensure maintenance of the system is conducted in accordance with the manufacturer's specifications.
11. If the final development plans deviate from the dwelling specifications listed in this report and if standard water reduction fittings are not included, then effluent disposal design calculations will require revising. In any case, there is sufficient space at the site for the extension of the disposal field.
12. If the final disposal field is not sited within the area identified in Appendix 4 or if the soils encountered are inconsistent with those described, then the effluent disposal design will require revision by a suitably qualified Chartered Professional Engineer.



## 8. Conclusions

Geotechnical investigations indicate that the site is presently stable, and the subsoil properties have adequate strength parameters necessary for the proposed development provided that the recommendations made in this report are followed.

The development will need to be carried out in accordance with proper engineering practice and the following guidelines:

1. Soils are considered to be Highly Expansive, Class H soils as per NZ Building Code Clause B1. This means that the encountered clays may be prone to moderate volume changes (swelling and shrinking) that are directly related to changes in water content. Shrinkable soils are a significant risk to foundations. Expansive soils fall outside the definition of “good ground” according to NZS 3604:2011, therefore specific foundation design is required for the site.
2. The site meets the definition of Class C – Shallow soil sites as per NZS1170.5.
3. Scala penetrometer testing shows the >200kPa uncorrected ultimate bearing capacity is generally available from the existing ground level to 1.1 mbgl across the site.
4. Scala penetrometer testing shows the >300kPa uncorrected ultimate bearing capacity is generally available below 1.2 mbgl across the site.
5. Slope Stability Analysis
  - a. Satisfactory factors of safety were achieved across all modelled scenarios.
6. Shallow foundations – SED stiffened concrete slab recommendations
  - a. Shallow foundations can be designed for an uncorrected UBC of 200 kPa or 300 kPa if embedded at a minimum of 1.1m or 1.2 m below the existing ground level and below any topsoil, respectively.
  - b. The shallow foundations shall be a SED stiffened concrete slab (e.g. RibRaft) specifically designed in accordance with AS2870 and NZ Building Code Clause B1 for Class ‘H’ soils for a characteristic surface movement of 78 mm is suitable.
7. Pile Foundations
  - a. Bored or driven pile foundations are suitable and recommended for the proposed development.
  - b. Piles are to be embedded a minimum of 1.5 m below the existing ground level into the stiff CLAY encountered.
  - c. For shaft capacity and lateral capacity of piles, the upper 0.75 mbgl should not be relied upon to provide any resistance due to the presence of expansive soils.
  - d. Piled foundation design should be carried out in accordance with NZ Building Code B1/VM4 utilising the parameters provided in this report.

- e. Design is to be carried out by a suitably qualified engineer.

8. Effluent Treatment and Disposal

- a. An AES system is to be used for this site
  - b. Treated effluent is to be gravity fed to the disposal site
  - c. Effluent disposal field is to be 58 m<sup>2</sup> with a reserve area of 17.4 m<sup>2</sup>
  - d. The minimum effluent tank capacity is to be 2760 L
9. Any earthworks conducted at the site should be undertaken and tested in accordance with NZS4431:2022. Compacted hardfill beneath the building platform exceeding a depth of 300mm will require testing and certification by a suitably qualified engineer.
10. Further inspections will be required including stripped ground (undercut inspection), compaction testing if hardfill placement exceeds 300 mm, edge pile inspection, and pile inspections if this foundation method is selected.
11. The site is considered suitable for the proposed development provided the recommendations in this report are followed.

All work should be carried out under the guidance of a Chartered Professional Engineer with relevant geotechnical experience.



## 9. Limitations

This report has been prepared for the benefit of Jason Friendlander c/o Steven Lawson's Architects as our clients with respect to a geotechnical investigation for building consent with the Far North District Council. It shall not be relied upon for any other purpose. The reliance by other parties on the information or opinions contained in this report shall, without our prior review and agreement in writing, be at such parties' sole risk.

Opinions and judgments expressed herein are based on our understanding and interpretation of current regulatory standards and should not be construed as legal opinions. Where opinions or judgments are to be relied on, they should be independently verified with appropriate legal advice. Any recommendations, opinions, or guidance provided by Cook Costello in this report are limited to technical engineering requirements and are not made under the Financial Advisers Act 2008.

Recommendations and opinions in this report are based on data from testing and observations undertaken on site. The nature and continuity of subsoil conditions away from the tests are inferred and it must be appreciated that actual conditions could vary considerably from the assumed model.

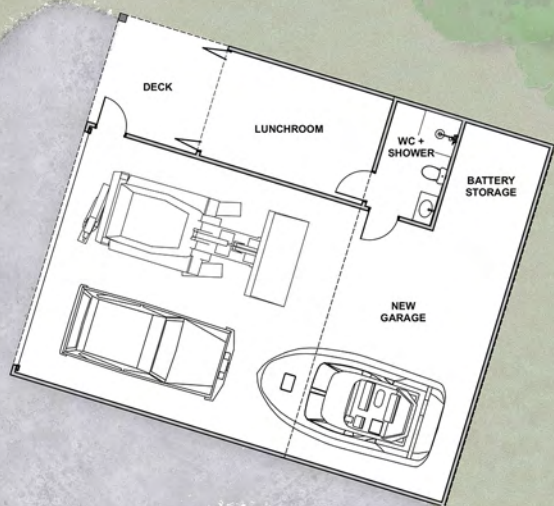
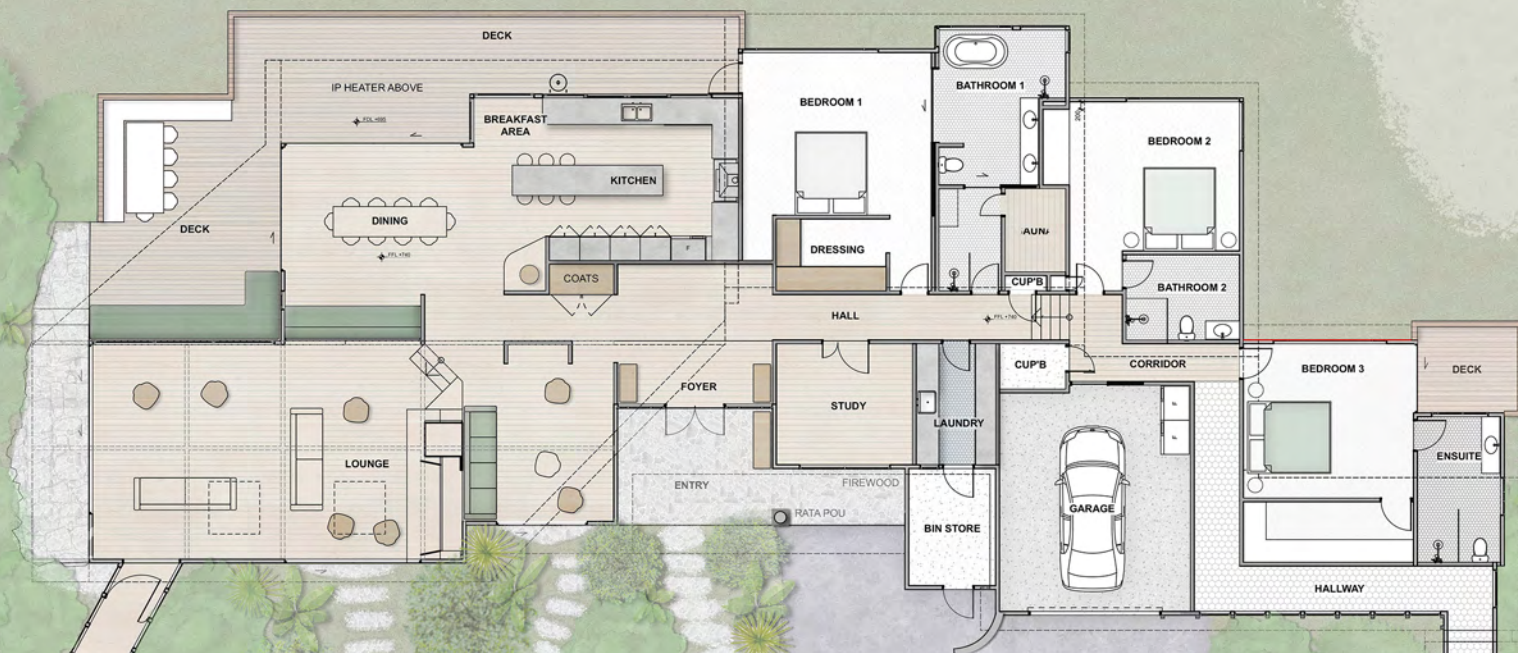
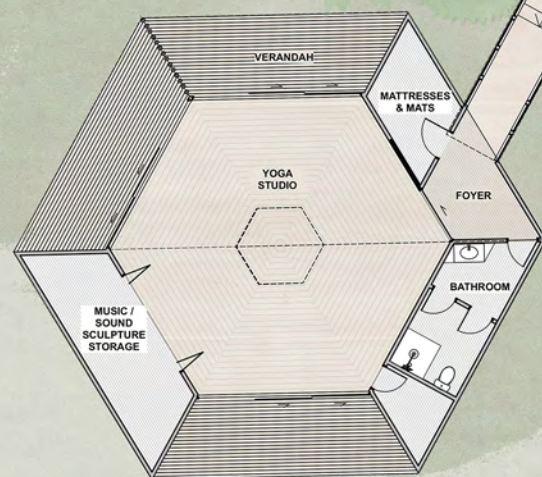
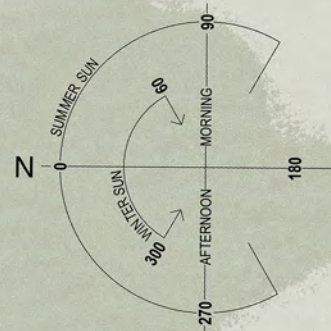
During excavation and construction, the site should be examined by a Cook Costello Engineer or Engineering Geologist to judge whether the exposed subsoils are compatible with the inferred conditions on which the report has been based. It is possible that the nature of the exposed subsoil may require further investigation and modification of the design based on this report. In any event, it is essential that the firm is notified if there is any variation in subsoil conditions from those described in the report as it may affect the design parameters recommended in the report.

Cook Costello has performed the services for this project in accordance with the standard agreement for consulting services and current professional standards for environmental site assessment. No guarantees are either expressed or implied.

There is no investigation that is thorough enough to preclude the presence of materials at the site which presently, or in the future, may be considered hazardous. Because regulatory evaluation criteria are constantly changing, concentrations of contaminants present and considered to be acceptable now may in the future become subject to different regulatory standards which cause them to become unacceptable and require further remediation for this site to be suitable for the existing or proposed land use activities.

## Appendix 1: Conceptual plans





TAUPŌ BAY HOUSE | FRIEDLANDER  
CONCEPT PLAN 1:100 | NOVEMBER 2024





PROPOSED  
EXISTING

TAUPŌ BAY HOUSE | FRIEDLANDER  
CONCEPT PLAN 1:100 | NOVEMBER 2024

STEVEN  
LAWSON  
ARCHITECT











































## Appendix 2: Site Testing Plan






LEGENDS

- ▲ Scala Penetrometer
- ⊗ Cone Penetration Test
- ⊕ Hand Auger with Scala Penetrometer Test
- Top Energy Power Line
- Cross Section A for Slide2
- Contours



NOT FOR CONSTRUCTION

 <b>cook   costello</b>	C			PROJECT DETAILS:  1025 TAUPU BAY ROAD, TAUPU BAY	DATE CREATED 07/02/2025	DRAWN SP	DESIGNED SP	APPROVED PC
	B				CCL REF NO 17622	SCALE 1:356	STATUS FOR INFORMATION	
	A	FIRST ISSUE	11/03/2025		TITLE:  SITE TESTING PLAN	DWG NUMBER DWG_17622_01	REVISION 01	
			SP			PC		
	REV.	REVISION DETAILS			DRAWN APP.			



## Appendix 3: Site Testing Results

## **TEST REPORT**

**PRELIMINARY**

**Lab Job No.:** 8020-1992

**Your Ref.:** -

**Date of Issue:** 13/03/2025

**Page:** 1 of 19

### **Test Report.**

### **No. WRE8020-1992-R002**

**PROJECT:** 1025 Taupo Bay

**CLIENT:** Cook Costello  
2 Norfolk Street,  
Whangarei, 0110

**ATTENTION:** Jasmin McVeigh

**INSTRUCTIONS:** Augerholes where required (not accredited)  
Determination of the penetration resistance using a dynamic cone (scala) penetrometer  
Hand Held Shear Vane Test

**TEST METHODS:** NZGS December 2005 (not accredited)  
NZS4402: 1988 Test 6.5.2  
NZGS: August 2001

**SAMPLING METHOD:** N/A

**TEST RESULTS:** As per laboratory sheets attached.

**Laboratory Technician**

**Approved Signatory**

**- CPT - Aggregates - Soil - Roading -**

This report shall not be reproduced except in full, without the written approval of the laboratory.



Tests indicated as not accredited are outside the scope of the laboratory's accreditation.



# AUGERHOLE LOG

PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation  
**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Borehole No.:** HA03/SP07  
**Hole Depth:** 3.00 m  
**Coordinates:**  
**Location:** 1025 Taupo Bay  
**Sheet:** 1 of 1  
**Date:** 25/02/25  
**Ground Level:**

Unit	Geological Interpretation In accordance with NZGS 2005	USCS	Legend	Depth (m)	Water	Relative Density	Vane Shear Strength (kPa) Tested in accordance with NZGS Aug 2001			Samples		
							Scala Penetrometer NZS4402: 1988 Test 6.5.2 - Procedure 2 (blows / 50mm)					
	TOPSOIL, brown, moist	Pt						Blows	● Peak ○ Residual			
	silty CLAY, traces of sand, brown with brown streaking, moist, moderate plasticity	CL		0.5	Groundwater Not Encountered			220+				
	colour change to light brown/white with brown streaking, moist, moderate plasticity			1.0				220+				
				1.5				220+				
				2.0				220+				
			clayey SILT, brown with orange brown and light brown streaks, moist, low plasticity	ML			2.5			220+		
							2.6					
							2.7					
							2.8					
							2.9					
							3.0					
		End of Borehole (no recovery)										

## Remarks

Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test  
Note: Scala Penetrometer interpretation is not endorsed

## Water

- ▼ Standing Water Level  
◁ Out flow  
▷ In flow

## Investigation Type

- ☐ Hand Auger  
☒ Hand Auger + Scala (DCP)

**Contractor:**

Geocivil

**Equipment:**

Hand Auger and Scala

**Recorded By:**

M.A

**Recorded Date:**

25/02/2025

**Laboratory Technician:**

**Approved Signatory:**

# AUGERHOLE LOG

PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

<b>Lab Job No.:</b> 8020-1992	<b>Borehole No.:</b> HA04/SP11	<b>Sheet:</b> 1 of 1
<b>Client:</b> Cook Costello	<b>Hole Depth:</b> 3.00 m	
<b>Job:</b> Geotechnical Investigation	<b>Coordinates:</b>	<b>Date:</b> 25/02/25
<b>Report No.:</b> WRE8020-1992-R002	<b>Location:</b> 1025 Taupo Bay	<b>Ground Level:</b>
<b>Client Ref. No.:</b> -		

Unit	Geological Interpretation In accordance with NZGS 2005	USCS	Legend	Depth (m)	Water	Relative Density	Vane Shear Strength (kPa) Tested in accordance with NZGS Aug 2001	Scala Penetrometer NZS4402: 1988 Test 6.5.2 - Procedure 2 (blows / 50mm)	Peak Residual	Samples
	silty CLAY, traces of sand, brown with orange speckles, dry-moist, moderate plasticity (tree roots @1.0m)	CL		0.5						
	colour change to grey green	CL		1.0						
	colour change add light brown and orange streaks	CL		1.5						
	End of Borehole (no recovery) - too firm to dig			1.5						
				2.0						
				2.5						
				3.0						

Remarks	Water	Investigation Type
Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test Note: Scala Penetrometer interpretation is not endorsed	▼ Standing Water Level ◁ Out flow ▷ In flow	<input type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Hand Auger + Scala (DCP)
<b>Contractor:</b> Geocivil	<b>Equipment:</b> Hand Auger and Scala	<b>Recorded By:</b> M.A.
		<b>Recorded Date:</b> 25/02/2025
	<b>Laboratory Technician:</b>	<b>Approved Signatory:</b>



# AUGERHOLE LOG

PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation









**Borehole No.:** HA06  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**

Unit	Geological Interpretation In accordance with NZGS 2005	USCS	Legend	Depth (m)	Water	Relative Density	Vane Shear Strength (kPa) Tested in accordance with NZGS Aug 2001		Samples
							Scala Penetrometer NZS4402: 1988 Test 6.5.2 - Procedure 2 (blows / 50mm)	Blows	
	TOPSOIL, brown, dry-moist	Pt							
	silty CLAY, traces of sand, light brown with brown speckling, moist, moderate plasticity	CL		0.5					219+
	colour change to light brown with red mottling	CL		1.0					219+
	colour change to reddish brown	CL		1.5					181/44
	colour change to pink with white mottling	CL		2.0					175/62
	clayey SILT, traces of sand, reddish brown mottling, moist, moderate plasticity	ML		2.5					156/66
	traces of gravel; up to 3mm	ML		3.0					187/66
	colour change to pink with white and brown mottling, moist	ML							
	End of Borehole (target depth)								

<b>Remarks</b>		<b>Water</b>		<b>Investigation Type</b>	
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>		<p>▼ Standing Water Level</p> <p>◁ Out flow</p> <p>▷ In flow</p>		<p><input type="checkbox"/> Hand Auger</p> <p><input checked="" type="checkbox"/> Hand Auger + Scala (DCP)</p>	
<b>Contractor:</b>	<b>Equipment:</b>	<b>Recorded By:</b>	<b>Laboratory Technician:</b>	<b>Approved Signatory:</b>	
Geocivil	Hand Auger and Scala	M.A			
		<b>Recorded Date:</b>			
		25/02/2025			

# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

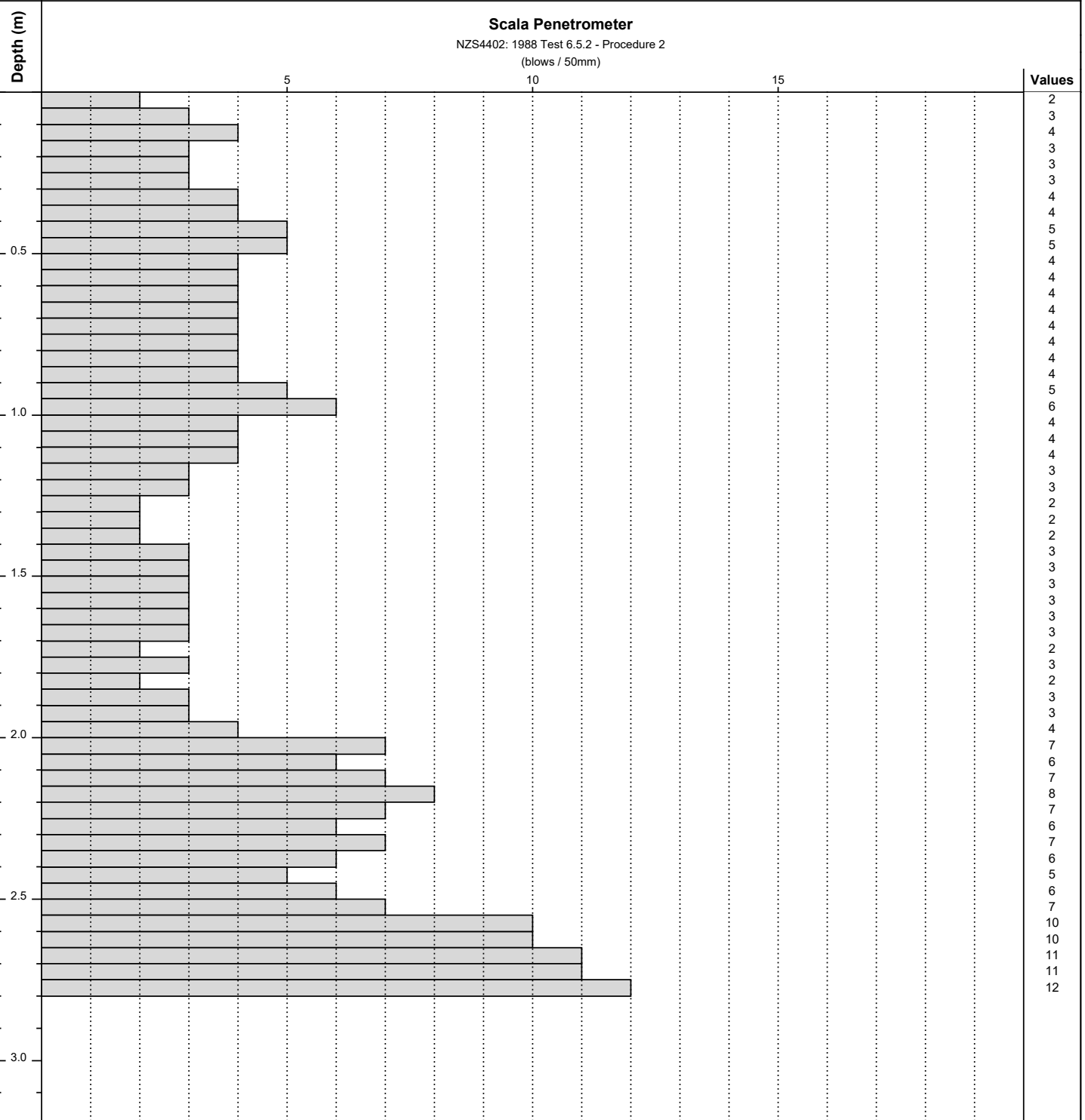
**Test No.:** SP08  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**



<b>Remarks</b>		<b>Investigation Type</b>		
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>		<input checked="" type="checkbox"/> Scala (DCP)		
<b>Contractor:</b>	<b>Equipment:</b>	<b>Recorded By:</b>	<b>Laboratory Technician:</b>	<b>Approved Signatory:</b>
Geocivil	DCP	<b>Recorded Date:</b>		



# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

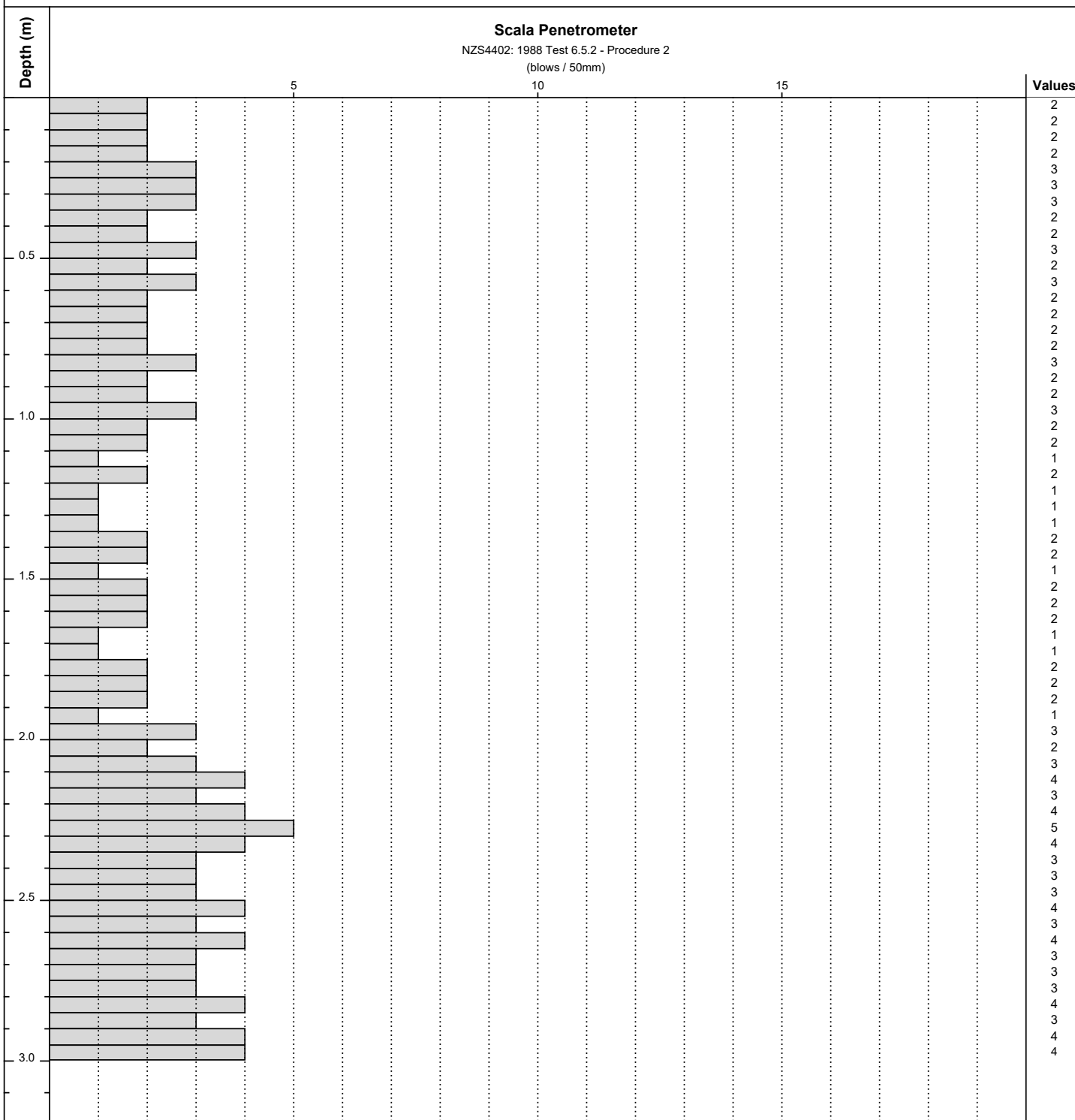
**Test No.:** SP09  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**



### Remarks

### Investigation Type

☒ Scala (DCP)

Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test  
Note: Scala Penetrometer interpretation is not endorsed

<b>Contractor:</b>  Geocivil	<b>Equipment:</b>  DCP	<b>Recorded By:</b>  <b>Recorded Date:</b>	<b>Laboratory Technician:</b>	<b>Approved Signatory:</b>
------------------------------------	------------------------------	--	-------------------------------	----------------------------

# DYNAMIC CONE PENETROMETER TEST

PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

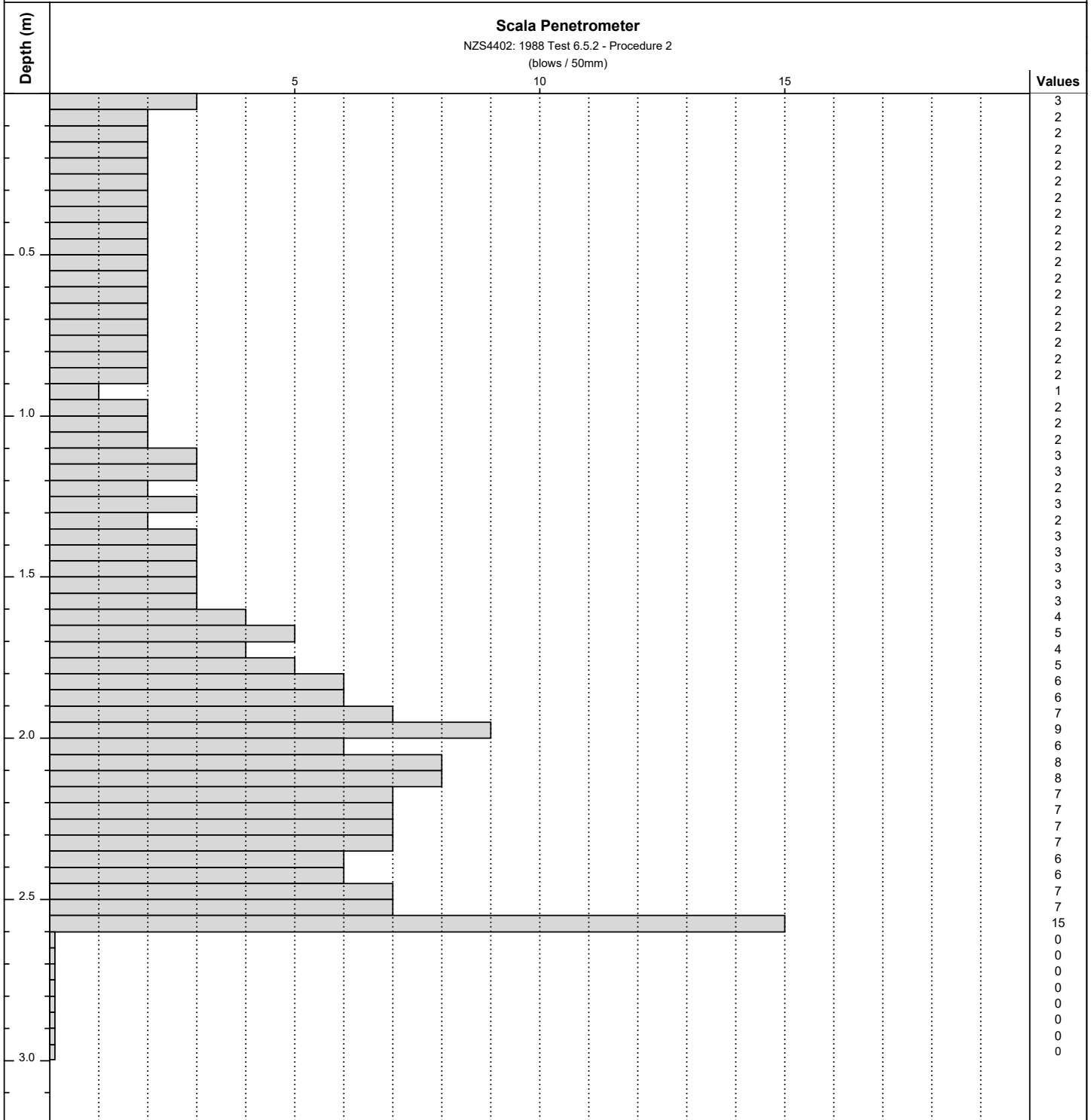
**Test No.:** SP10  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**



<b>Remarks</b>		<b>Investigation Type</b>	
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>		<input checked="" type="checkbox"/> Scala (DCP)	
<b>Contractor:</b>	<b>Equipment:</b>	<b>Recorded By:</b>	<b>Laboratory Technician:</b>
Geocivil	DCP	<b>Recorded Date:</b>	<b>Approved Signatory:</b>



# DYNAMIC CONE PENETROMETER TEST

PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

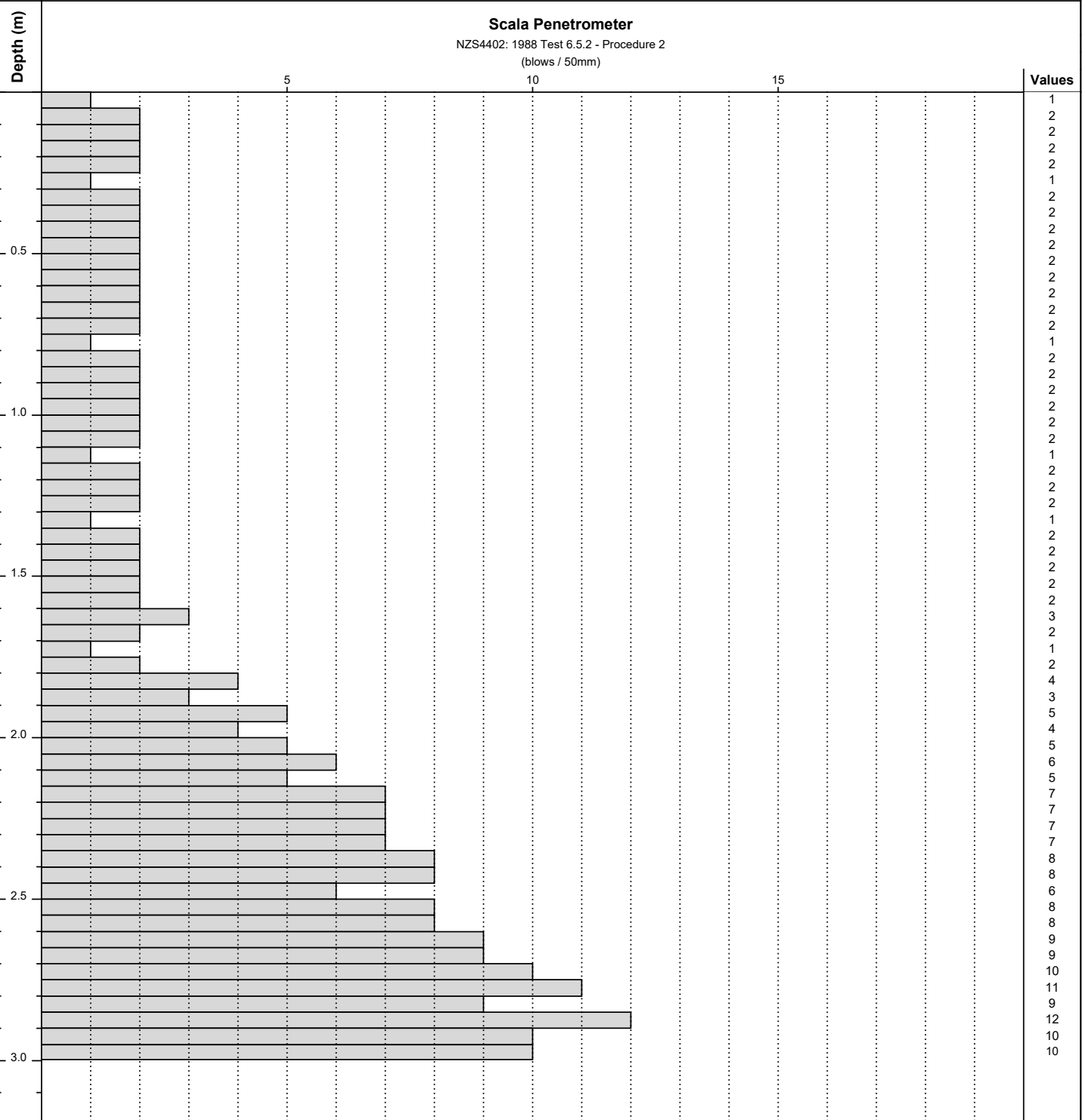
**Test No.:** SP12  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**



<b>Remarks</b>		<b>Investigation Type</b>	
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>		<input checked="" type="checkbox"/> Scala (DCP)	
<b>Contractor:</b>	<b>Equipment:</b>	<b>Recorded By:</b>	<b>Laboratory Technician:</b>
Geocivil	DCP	<b>Recorded Date:</b>	<b>Approved Signatory:</b>

# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

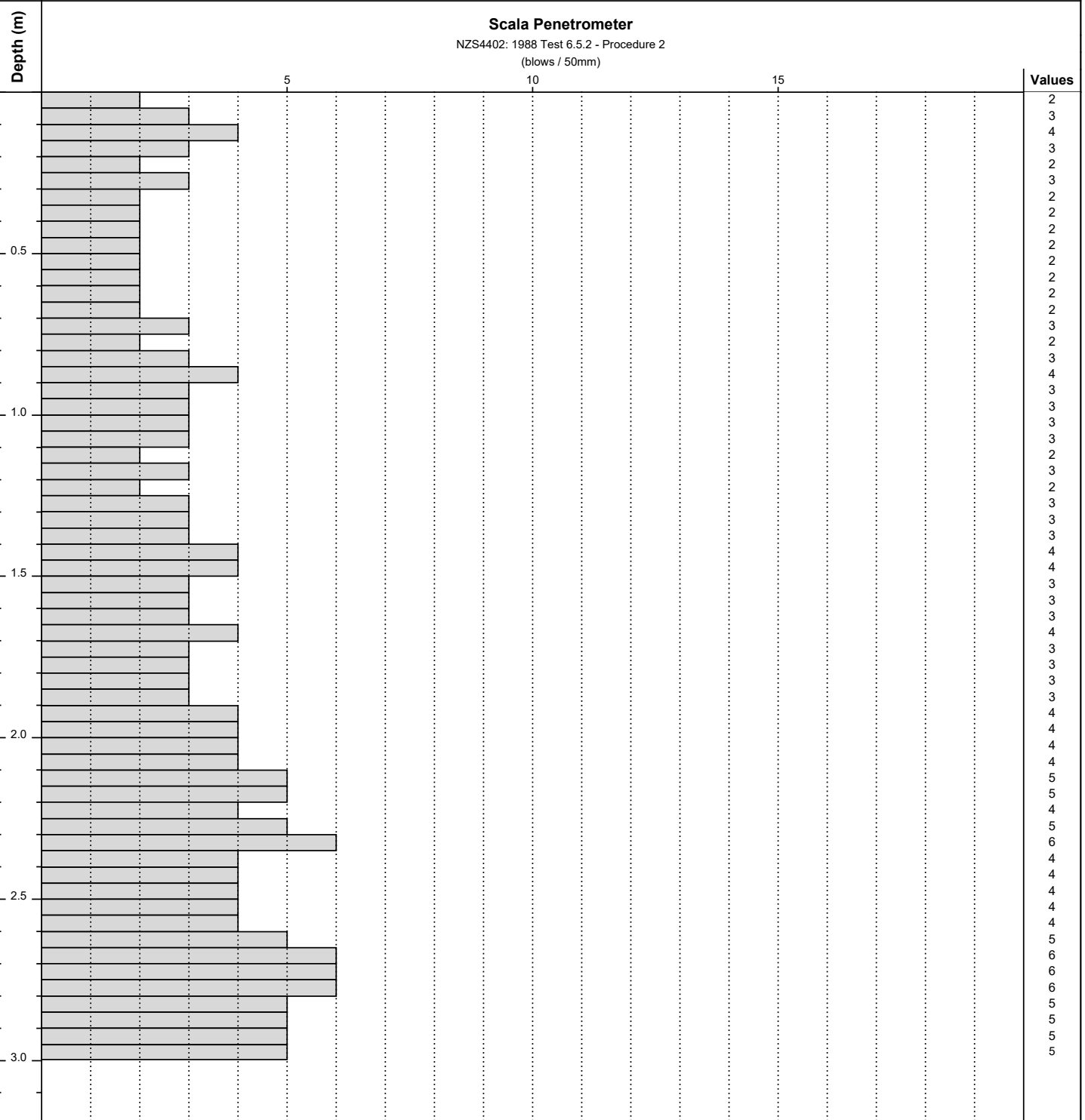
**Test No.:** SP13  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**



<b>Remarks</b>		<b>Investigation Type</b>	
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>		<input checked="" type="checkbox"/> Scala (DCP)	
<b>Contractor:</b>	<b>Equipment:</b>	<b>Recorded By:</b>	<b>Laboratory Technician:</b>
Geocivil	DCP	<b>Recorded Date:</b>	<b>Approved Signatory:</b>

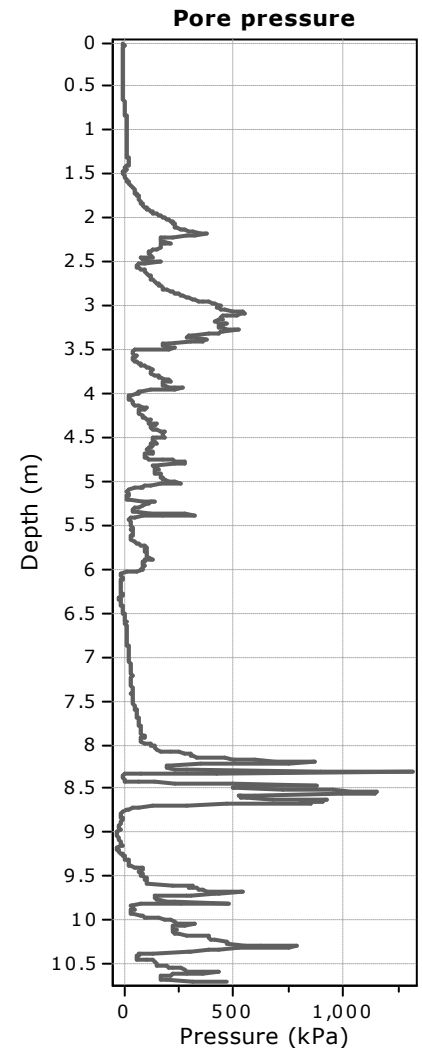
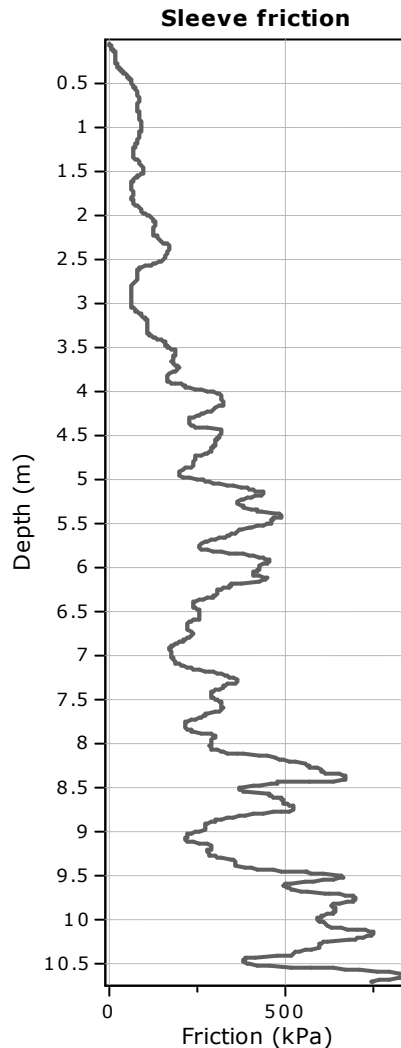
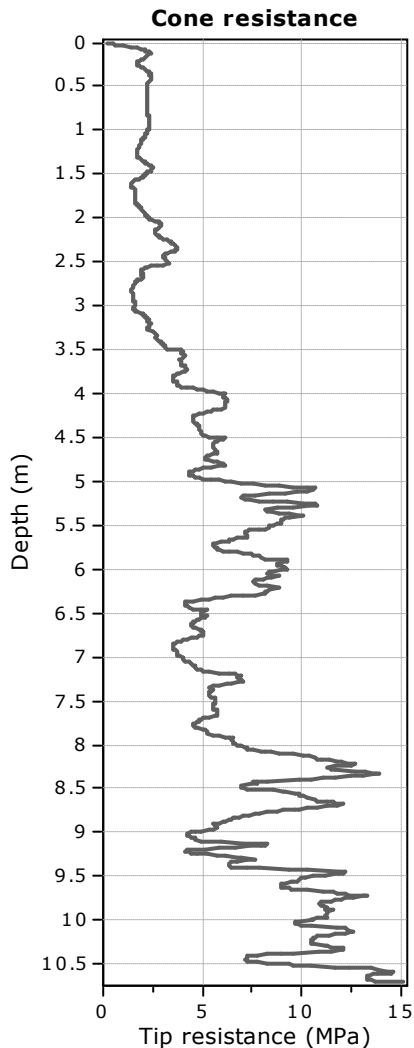


## Appendix 4: CPT Results

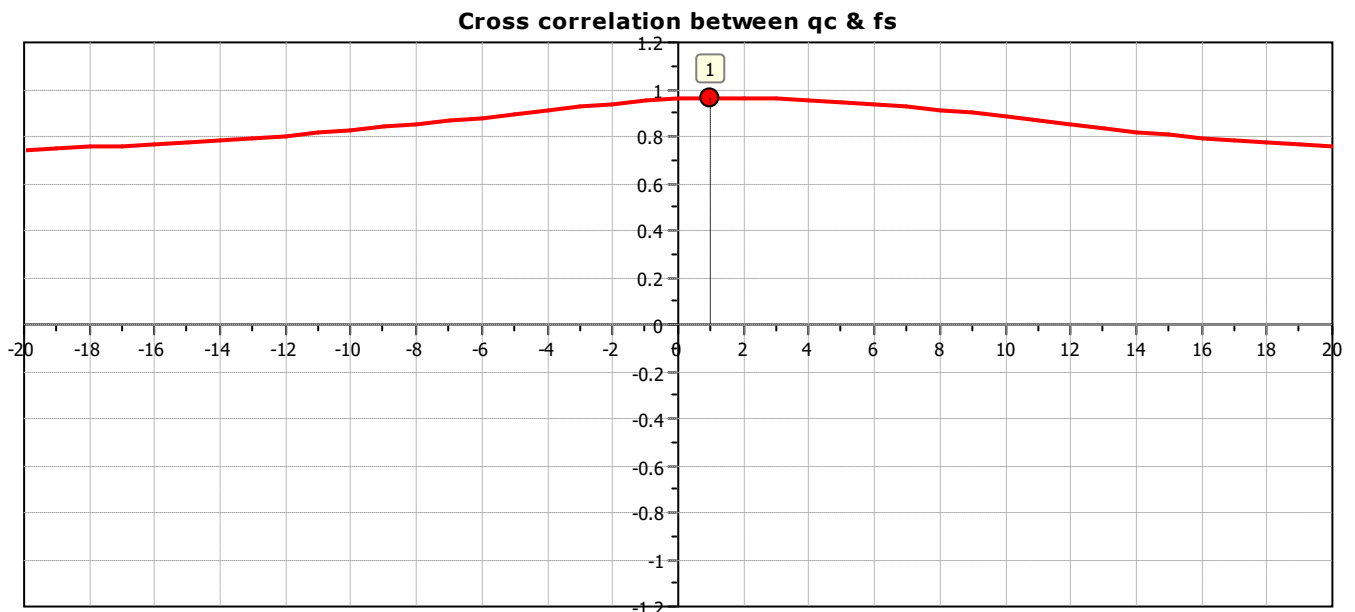


Project:

Location:



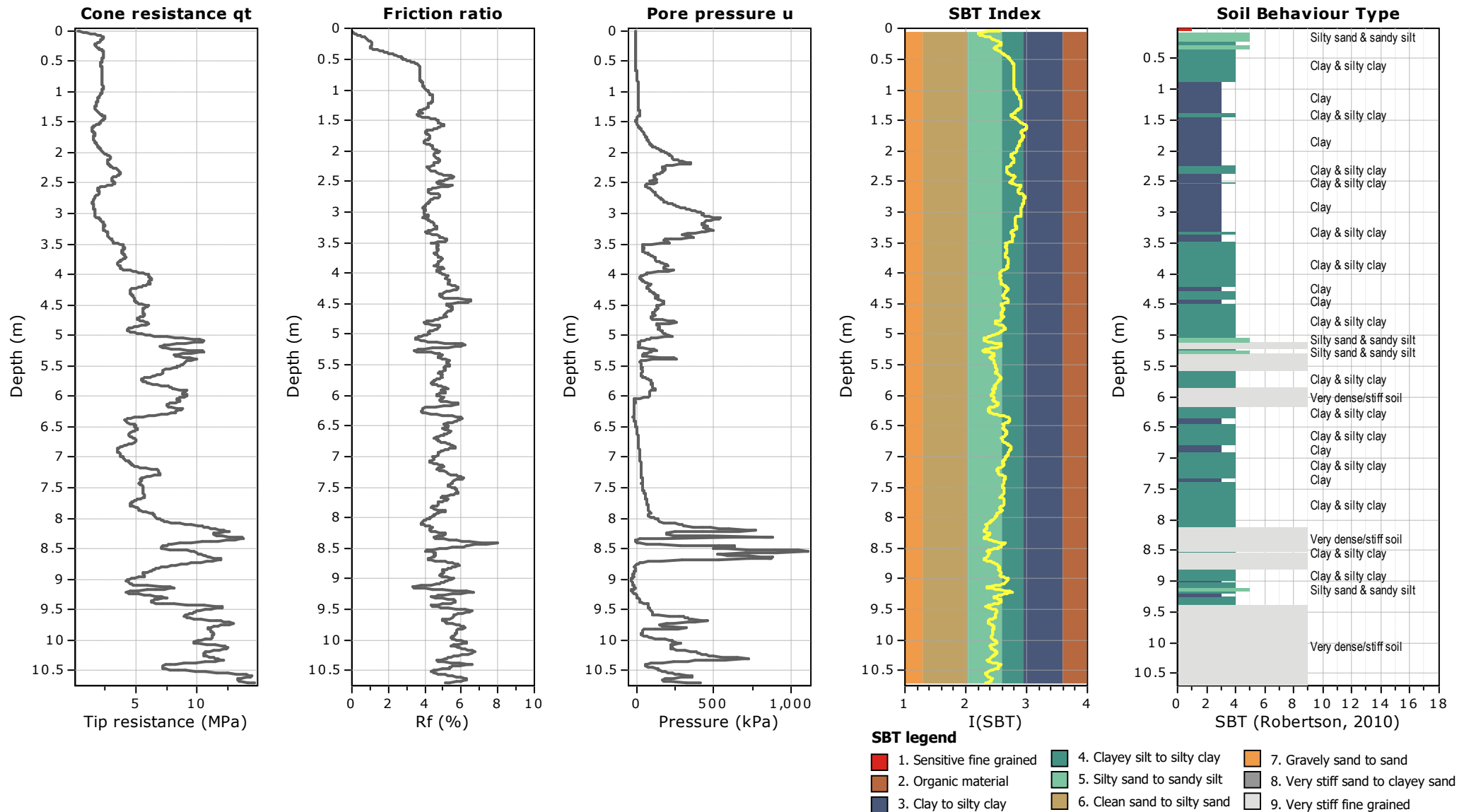
The plot below presents the cross correlation coefficient between the raw  $q_c$  and  $f_s$  values (as measured on the field). X axes presents the lag distance (one lag is the distance between two successive CPT measurements).





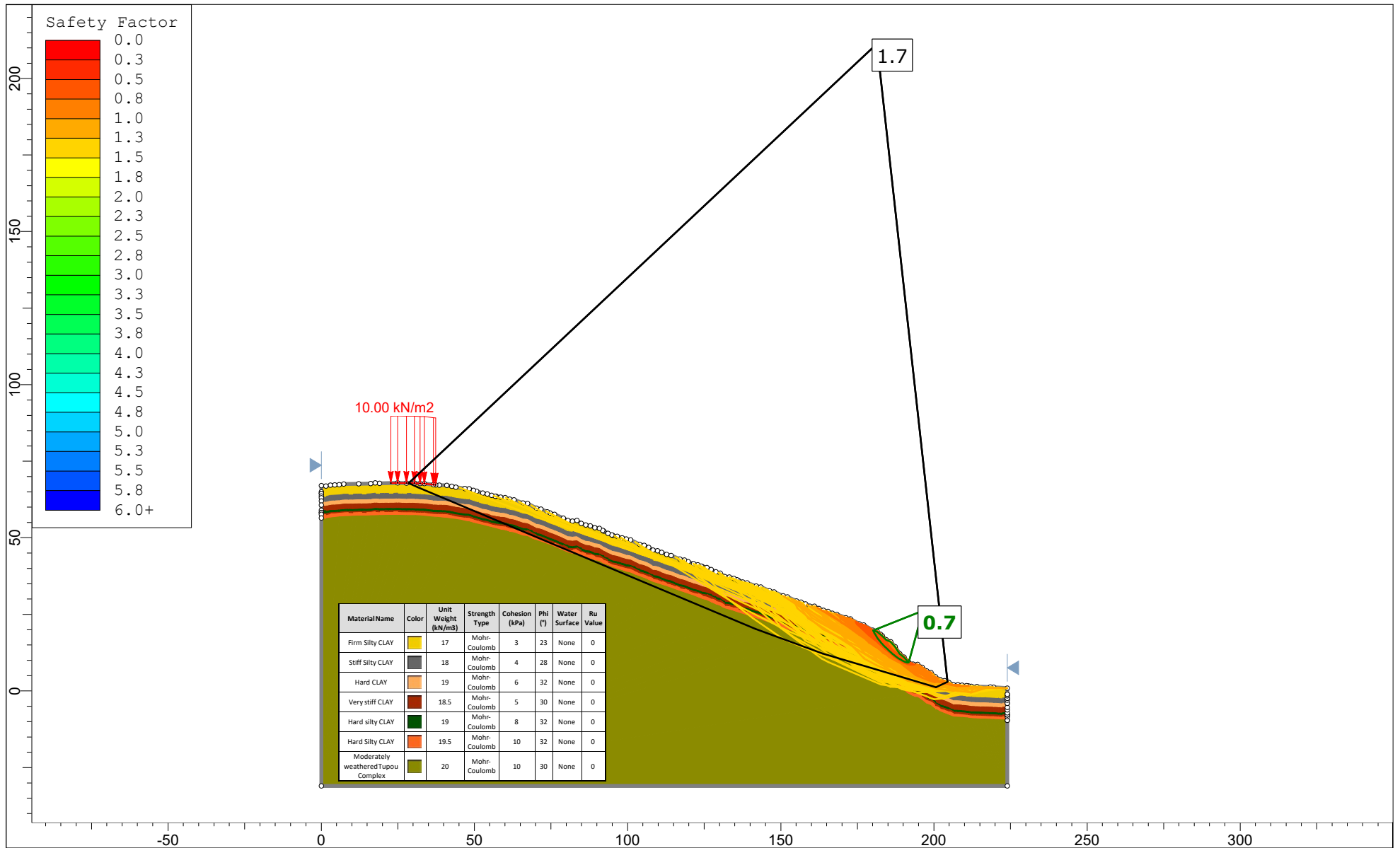
**Project:**

**Location:**

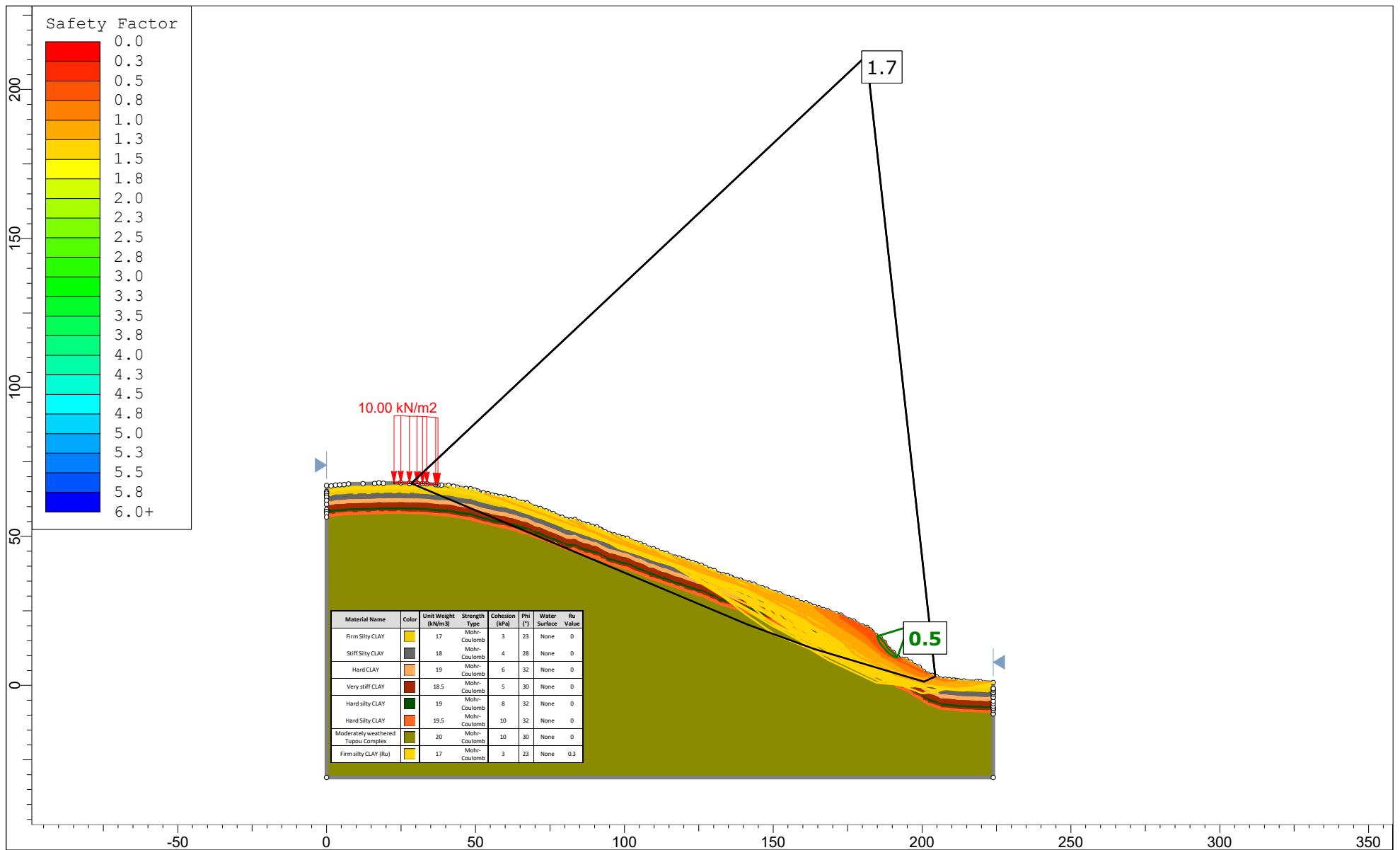


## Appendix 5: Slope Stability Analysis



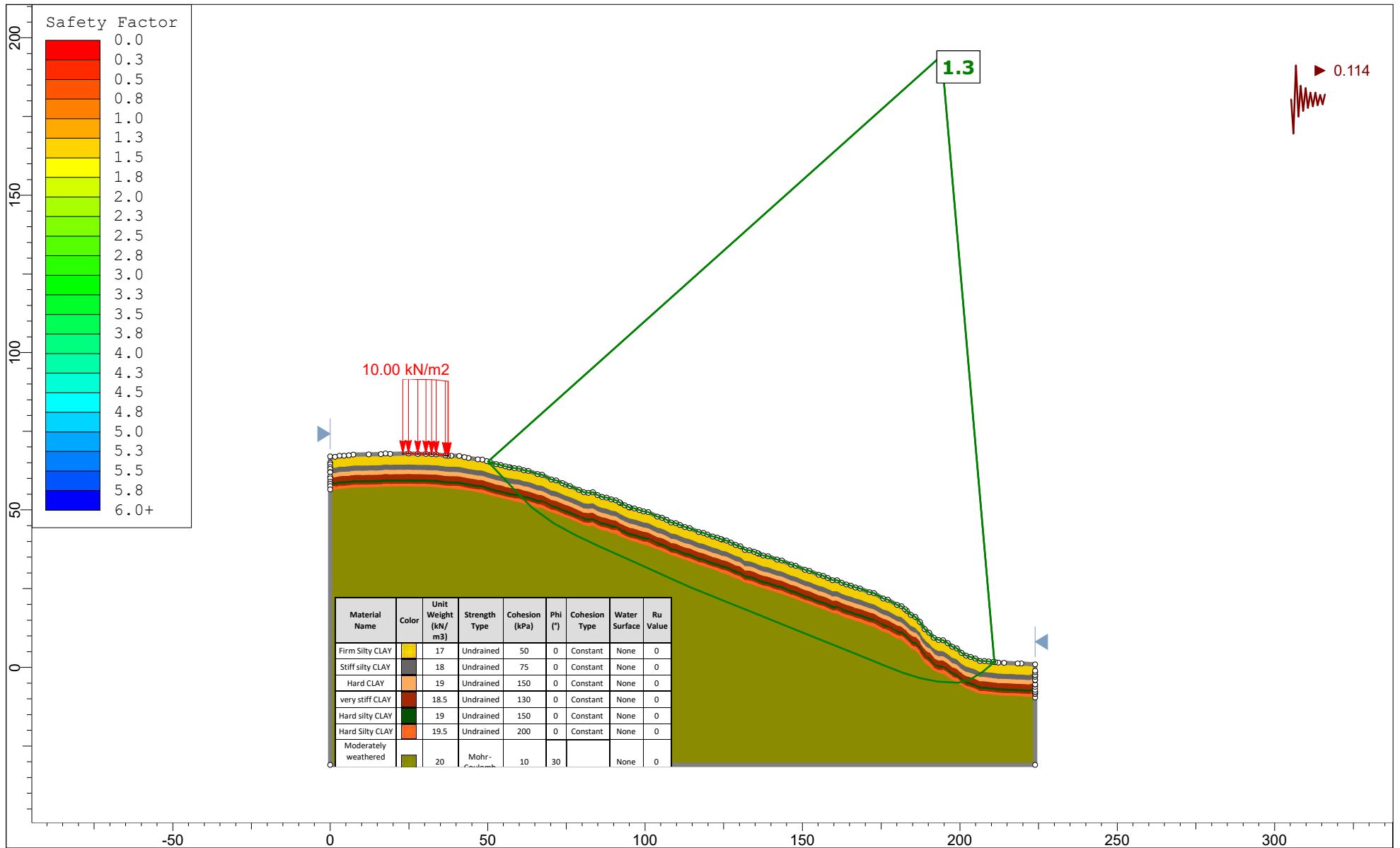


Project		17622- Taupo Bay Road	
Analysis Description		Section A Static	
Drawn By	JM	Company	Cook Costello
Date	3/03/2025, 10:22:31 am	File Name	section A.slmd



Project		17622- Taupo Bay Road	
Analysis Description		Section A Raised Groundwater	
Drawn By	JM	Company	Cook Costello
Date	3/03/2025, 10:22:31 am	File Name	section A.slmd





Project		17622 - 1025 Taupo Bay Road	
Analysis Description		Seismic- undrained	
Drawn By		JM	Company Cook Costello
Date		5/03/2025, 10:20:10 am	File Name section A undrained.slmd

## Appendix 6: Effluent Treatment and Disposal





Environmenttechnology  
wastewater treatment

Environment Technology (Et) Ph: 03 970 7979  
Email: info@et.nz www.et.nz

Et Nelson warehouse: 105 Pascoe St, Annesbrook, Nelson 7011

PS2

## AES Design Calculator - Residential\* Schedule of Materials



For use by wastewater system designers for sizing of AES wastewater treatment systems receiving residential strength wastewater. To be supplied to ET with Design / Construction drawings for peer review, then for a digital signature by ET and your submission to Consenting Authorities for construction consent.

Supply of AES components is based on an ET reviewed and digitally signed Calculator and construction drawings. Any changes to the design during the consent process must be reviewed by ET.

Site Address	1025 Taupo Bay Road, Taupo Bay, Northland				
Client Name	Jason Friedlander c/o Steven Lawson Architects	Client Email	addaed to ET database		
Designed By	Emily Thompson	Designer Phone #	021 656 367	Designer AES Cert. #	NZ00983
Installer		Installer Phone #		Installer AES Cert. #	
Council Area	Far North	Drainlayer Licence #		Date	12.03.25

Receiving soil category, surface waters, depth to water tables & all other site constraints are addressed by the Designer in the accompanying information.

from the	System designer's site and soil data. Enter data in light blue fields.			NOTES		
	Number of bedrooms	2	>> Enter "NA" if this design is for a campground, office, cafe etc without bedrooms.			
	Number of people	4	>> Enter "1" here if entering total daily design flow below and not a per person amount.			
	Daily wastewater design flow allowance per person (L/d)	145				
	Loading rate for AES pipes (L/m AES pipe/d)	38.0	>> Standard rate is 38 L/m AES pipe/d per OSET-NTP testing . <u>Please justify if not using standard rate in Designers notes below</u>			
	Do you want to use cut AES pipes - eg, 3.5 AES pipes per row? Y or N	N				
	AES bed - No. of rows of AES pipes	2	>> Longer AES beds increase contact area with surrounding soil.			
	Soil Category (per AS/NZS 1547) from site & soil evaluation	5	>> Contact ET for information regarding customising AES bed layouts to clay soils and sloping sites.			
	Design Loading Rate (DLR) based on soil category (mm/day)	10	>> Soil conditioning may be necessary. Ref AS/NZS 1547/ TP58/ GD06 & Notes below.			
	Sand depth beneath AES pipes (mm)	300	>> Standard 300mm achieves 3.5Log reduction for FC**; increase sand depth to further reduce FC. Total expected FC reduction through AES system in this design: 3.5Log***			
	Is there a pump between the septic tank and the AES bed? Y or N	n	>> Ensure there is 50mm min. fall between septic tank and AES pipes, and pipework laid at 1:100 min.			
	Is this property/ disposal site sloping? Y or N	Y	>> Ensure subsurface & surface water is diverted away from AES bed.			
	Is this design vented to the building terminal vent (TV)? Y or N	N				
	Diameter of high vent (mm)	100	>> 65mm, 80mm or 100mm, to be supplied with AES components.			
	Is sampling of the treated effluent required? Y or N	N				
	Distribution Box required Y or N	N		Number of ports required, including inlet port, and port for air vent if so designed.		
Designers						
notes (Editable)						

- Scarification of receiving surface is required in soil with elevated clay contents in Cat 4,5,6. In addition refer to AS/NZS 1547.2012, TP58 and GD06 (draft)

Always excavate and scarify parallel to the site slope and the rows of AES pipe.

- Specialist soils advice and special design techniques will be required for clay dominated soil having dispersive or shrink/swell behaviour. Refer AS/NZS 1547

- All sloping sites require special consideration regarding design of AES bed, sand extensions, surface water and construction methods as per AS/NZS 1547.

- Drainlayers ensure good construction techniques ref. AS/NZS 1547 are especially important in these soil types. Ref AS/NZS1547 & AES installation Instructions.

Plan view: AES bed extensions AES pipe bed    AES bed ext.		AES Bed Design Calculator Outcomes		AES Bed dimensions	
		Daily design flow (Q)	580.00 L/d		AES Pipe Bed
		Min. length of AES pipe rows	7.63 m	Length (m)	9.60
		No. of 3m AES pipes per row	3.00 lths	Width (m)	1.35
		Total volume of AES pipes/ total potential buffer capacity	1272.00 L	Sand Depth (m)	0.75
				Area (m <sup>2</sup> )	12.96
					45.04
		For 'Surrounding' extension or to increase bed length/ decrease width, enter "Y", otherwise leave blank.		If 'Y' enter required width (m) of AES bed, otherwise leave blank. Bed length will calculate automatically.	
				6.5	
		Length (m)	Width (m)	Minimum AES footprint required 58m2	
The dimensions of this AES bed with side extension/s are:		9.6	x	6.04	=
				58.0	m2 total
Total expected FC reduction through AES system in this design: 3.5Log***					

AES Bed Schedule of Materials			ET Signature box - ET Use Only	
AES 3m length pipes required	6	lengths		
AES couplings required	4	ea		
AES offset adaptors	4	ea		
100mm vent cap with mesh	1	ea		
Vent cowl for high vent	1	ea - 100mm diam.		
TV inspection not required				
Sample port not required				
Distribution box not required				
Total AES System Sand Solid Measure (guide only)	15.2	m <sup>3</sup>	Producer Statement PS-2 Design Review - approved by ET. NOTE: - This design review does not include review of the Site and Soil assessment by the Designer	
To be used as a guide only. This AES Design Calculator is an aid to calculate the AES components and their configuration. (Some single AES row layouts may be over-estimated by one coupling. Et will advise if this has occurred when doing the Design Review. Site and Soil conditions as specified in NZS1547:2012 are calibrated by a <b>Qualified Designer</b> . Environment Technology accepts no responsibility for this soil evaluation and the subsequent loading calculations or the DLR entered by the designer in this calculator.  AES pipes can be cut to length on site. AES pipes are supplied in 3 metre lengths only.			Reviewed by:	DB BM
			Date entry by:	ET
			17/03/2025 13:50 Job: J3239	
			Open PDF in Adobe Acrobat; hover over signature	
			Follow link below to download Signature Verficiation macro <a href="http://www.securedsigning.com/products/signature-verification-service">www.securedsigning.com/products/signature-verification-service</a> Click on signature in PDF to view signature validation	

\* Residential Effluent is classed as having less than 300mg/L BOD5 plus 350mg/L TSS, a combined total of 650mg/L prior to entering the septic tank, or a combined total of BOD + TSS of < 350mg/L prior to entering the AES bed and not including Industrial Effluent. Contact Et for assistance with high strength , abnormal ph or other parameter influent.

log reduction for Fecal Colliform (FC) in OSET-NTP Trial 12, 2016-17 benchmarking period.

medium sand - Pang (2009). *Microbial Removal Rates in Subsurface Media Estimated From Published Studies of Field Experiments and Large Intact Soil Cores*

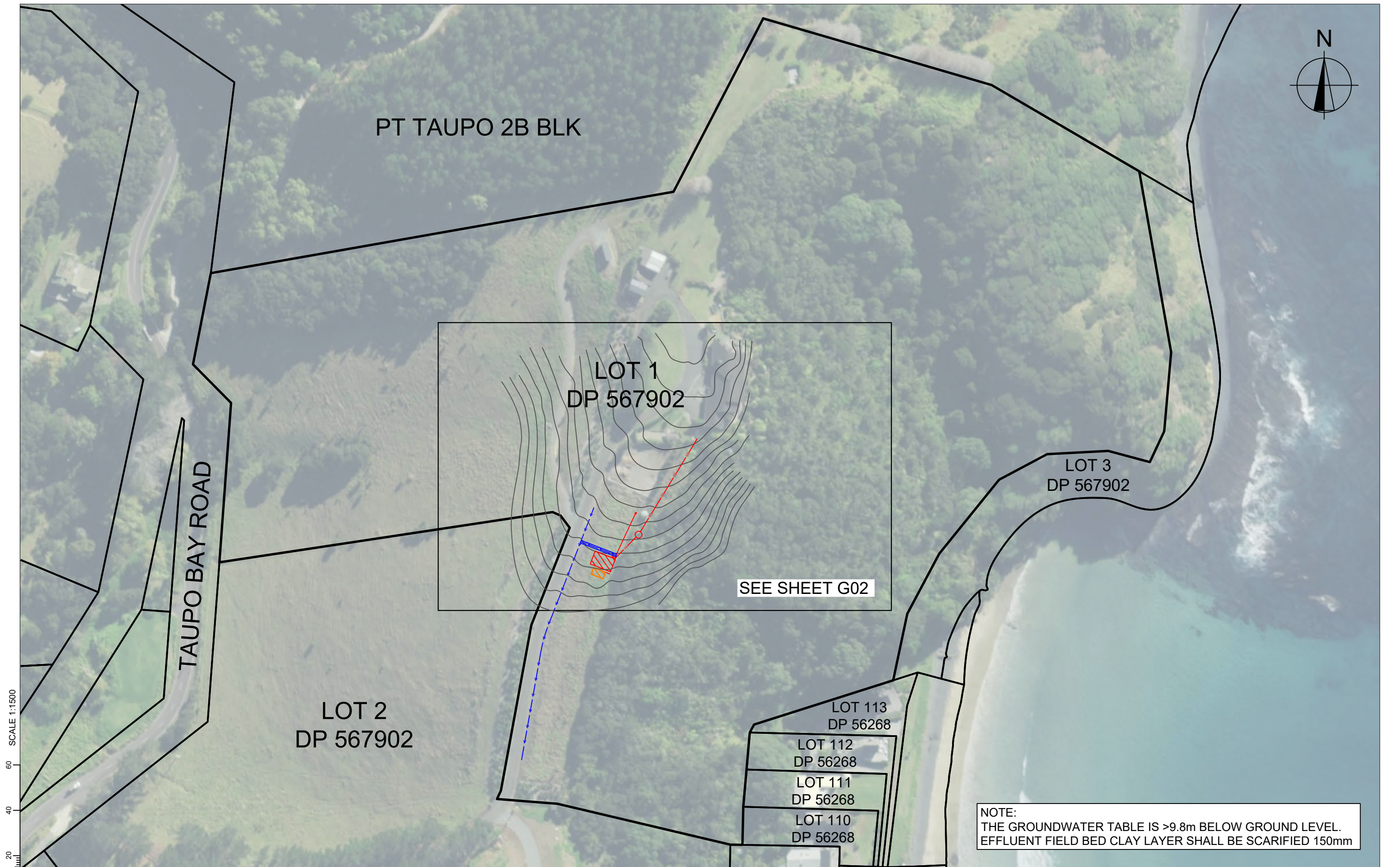
\*\* AES-38 single pass system achieved 3.5

\*\*\* Microbial removal rates through

For Design Review: -Email this Design Calculator along with a complete construction drawings to: - [design@et.nz](mailto:design@et.nz)

AES Components Order- Email a signed AES Design Calculator and a copy of the Council Consented Construction plans to: - [info@et.nz](mailto:info@et.nz)





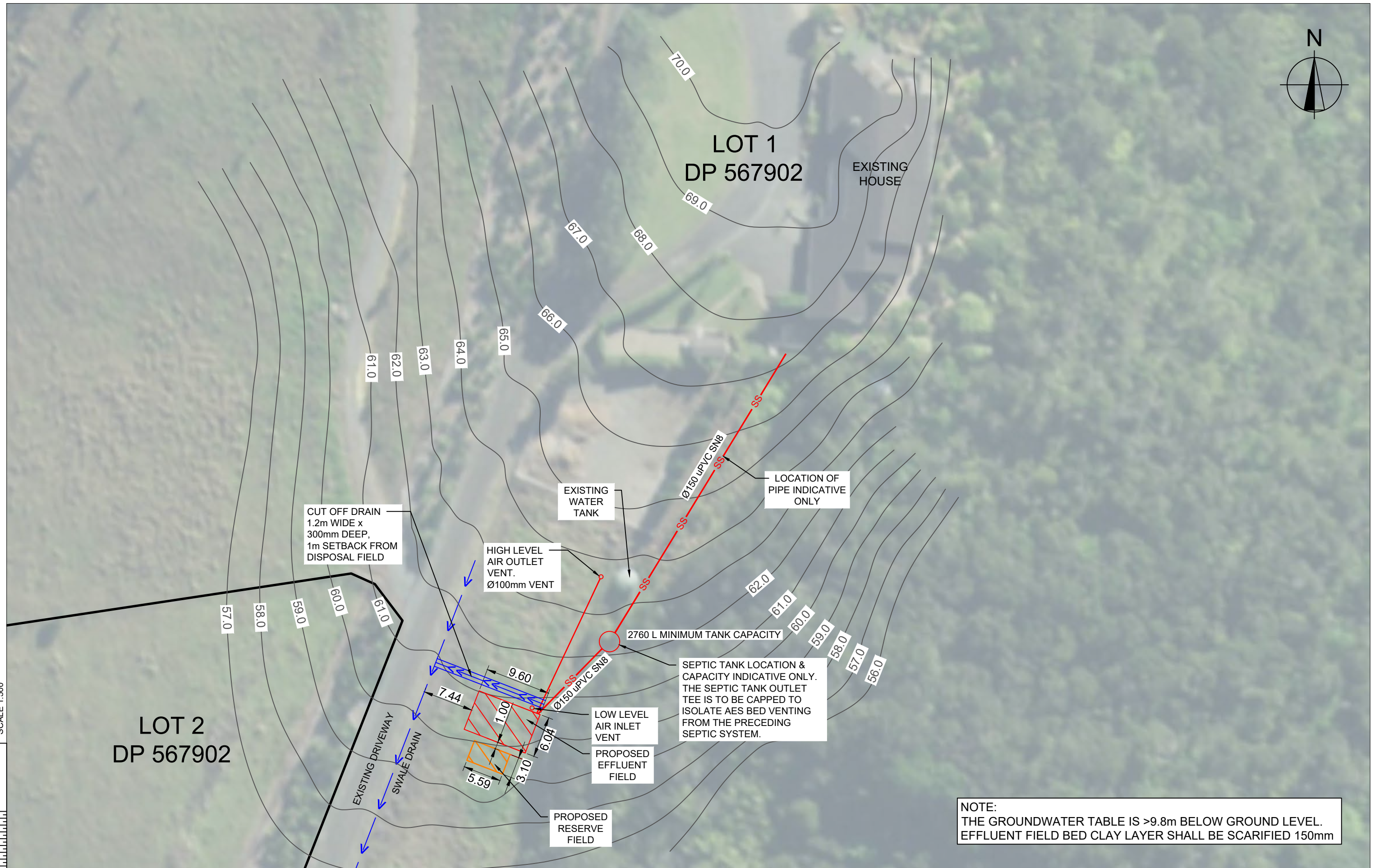
C			
B	MINOR CHANGES REQUESTED BY AES	14-03-25	
		KH	ET
A	1ST ISSUE	10-03-25	
		KH	ET
REV.	REVISION	DETAILS	DRAWN APP.

PROJECT DETAILS
JASON FRIEDLANDER 1025 TAUPO BAY ROAD TAUPO BAY LOT 1 DP 567902

TITLE
SITE PLAN OVERVIEW

DATE CREATED 10/03/2025	DRAWN K HANSARD	DESIGNED T WARD	APPROVED E THOMPSON
CCL REF NO 17622	SCALE 1:1500 @ A3	STATUS FOR CONSTRUCTION	
DWG NUMBER G01	REVISION B		





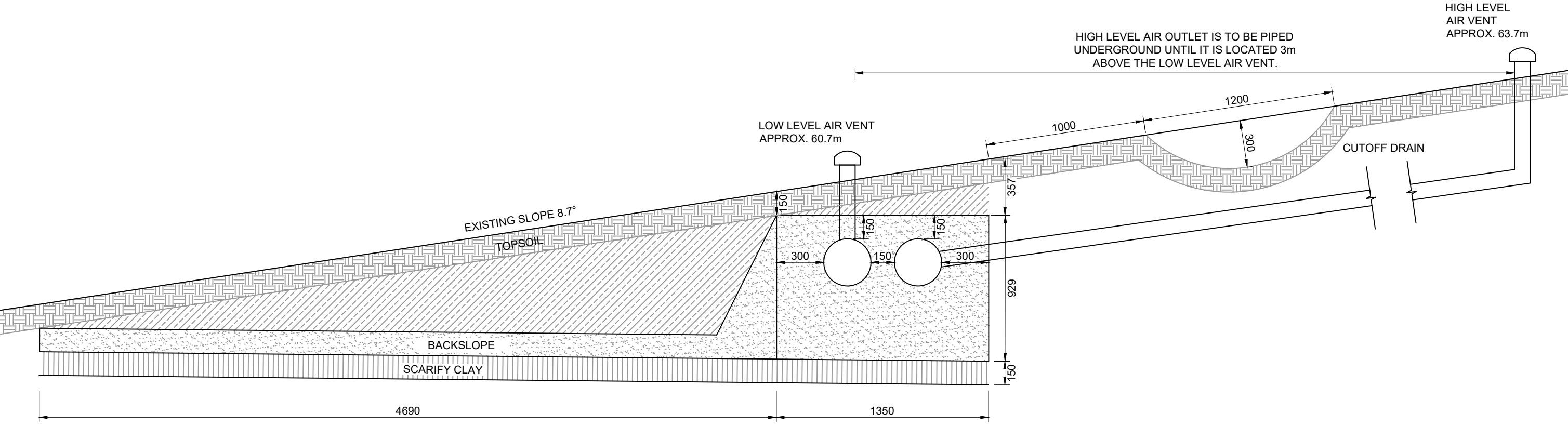
C			
B	MINOR CHANGES REQUESTED BY AES	14-03-25	
A	1ST ISSUE	10-03-25	
REV.	REVISION DETAILS	DRAWN	APP.

PROJECT DETAILS
JASON FRIEDLANDER 1025 TAUPU BAY ROAD TAUPU BAY LOT 1 DP 567902

TITLE
SITE PLAN

DATE CREATED 10/03/2025	DRAWN K HANSARD	DESIGNED T WARD	APPROVED E THOMPSON
CCL REF NO 17622	SCALE 1:500 @ A3		STATUS FOR CONSTRUCTION
DWG NUMBER G02			REVISION B





SCALE 1:25  
1.0  
0.5  
0



C			
B			
A	1ST ISSUE	10-03-25	KH ET
REV.	REVISION DETAILS	DRAWN	APP.

PROJECT DETAILS
JASON FRIEDLANDER 1025 TAUPU BAY ROAD TAUPO BAY LOT 1 DP 567902

TITLE
AES EFFLUENT SYSTEM

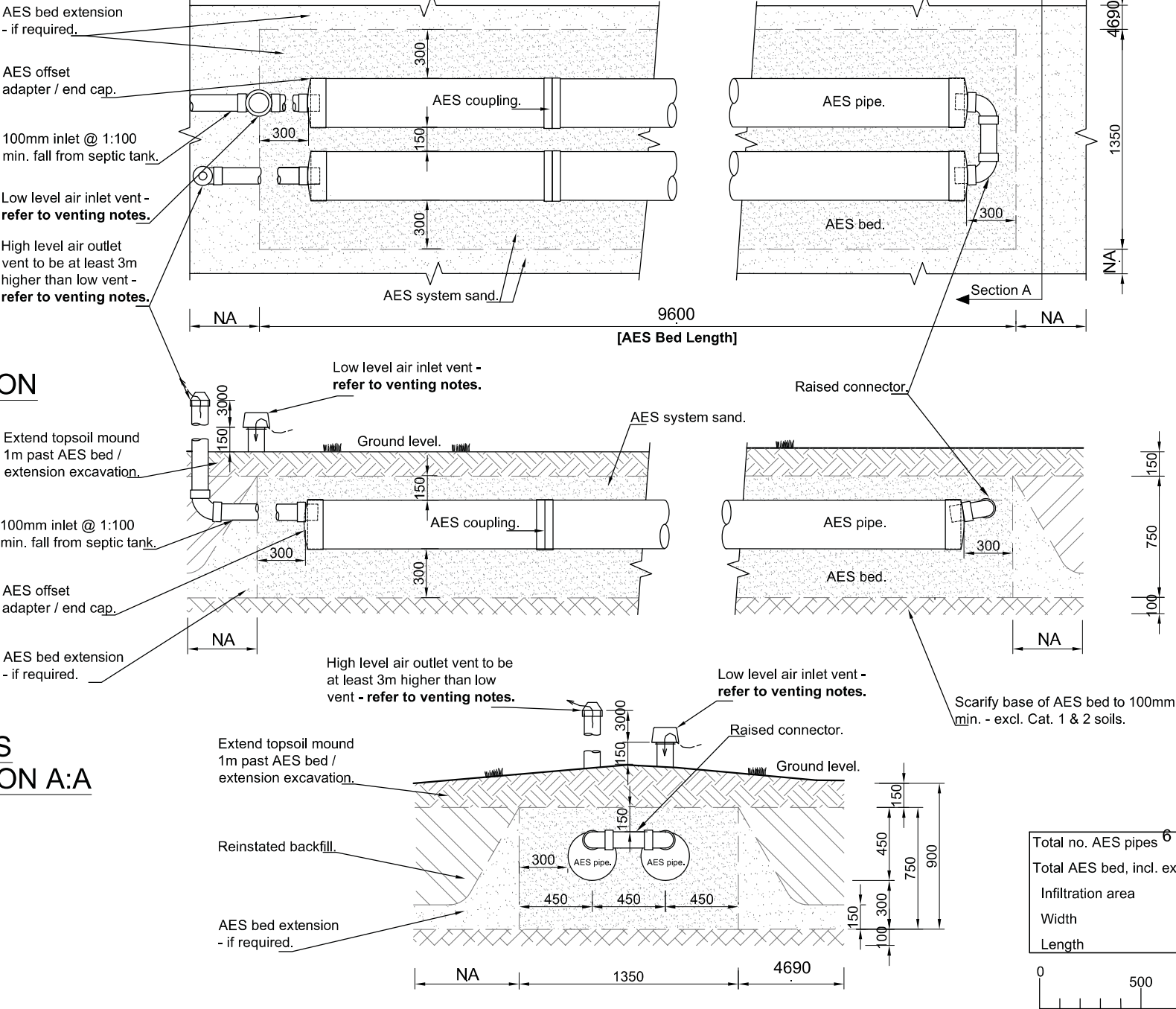
DATE CREATED 10/03/2025	DRAWN K HANSARD	DESIGNED T WARD	APPROVED E THOMPSON
CCL REF NO 17622	SCALE 1:25 @ A3		STATUS FOR CONSTRUCTION
DWG NUMBER G03			REVISION A



PLAN

LONG SECTION

CROSS SECTION A:A



NOTES

- General**
- Advanced Enviro-Septic (AES) pipes, fittings and bed to be constructed/installed in accordance with the AES Installation Manual.
  - AES pipes and fittings are supplied by Environment Technology Ltd, Et.
  - All associated pipework to comply with NZ Building Code G13, Foul Water, Acceptable Solutions, relevant standards and local/regional council requirements.
  - Unless otherwise stated all dimensions are in millimetres and all dimensions are minimums except pipe diameters and fittings.

- Venting of AES Pipework to Maintain Aerobic Internal Conditions**
- The high level air outlet vent to be 100, 80, or 65mm diameter DWV pipe, suitably supported on an adjacent building or post, to be 3m vertically elevated above the low level air inlet vent, 2 x 50mm DWV pipe can be used in internal building framing. Support to be provided to 1 meter below the top of the DWV vent pipe.
  - The low level air inlet vent to be 100mm DWV, positioned as close as practical to the AES bed and isolated with respect to air passage wherever practical from upstream influent pipework. Refer to the specific design of each project.
  - The location of air inlet and outlet vents can be remote from the AES bed with additional pipework to suit topography, building structures or landscaping. The high level air outlet vent should be positioned considering potential downdrafts or adjacent disturbed air flows.

- AES Bed Construction**
- An areal extension to the AES bed may be required to suit the permeability of the receiving soil in passive installations. These extensions may be on any or all sides of the bed. Refer to the AES bed dimensions noted on the specific design. N/A or not applicable denotes an extension is not required in this design.
  - A minimum of 50mm of fall is required between the septic tank outlet invert and the invert of the inlet to the AES bed or distribution box.
  - Trees/large shrubs cannot be planted on the AES bed.
  - AES bed 'System Sand' specification is usually met with within the local concrete sand specification. Refer ET website [www.et.nz/system-sand-suppliers/](http://www.et.nz/system-sand-suppliers/) for Et tested AES System Sand suppliers. Et offers cost free sand sieve analysis upon receipt of a two cupful size sample.

DESIGNED BY  
Emily Thompson  
Cook Costello

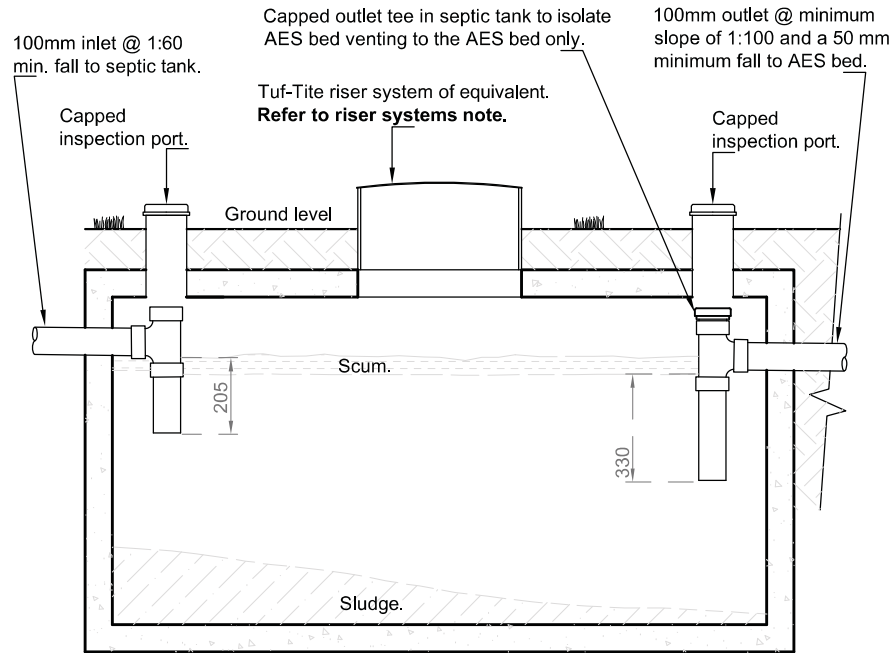
PROJECT  
Lot 1 DP 567902,  
Taupo Bay, Far North,  
Northland.

DRAWING TITLE  
Standard AES Bed - Two Row

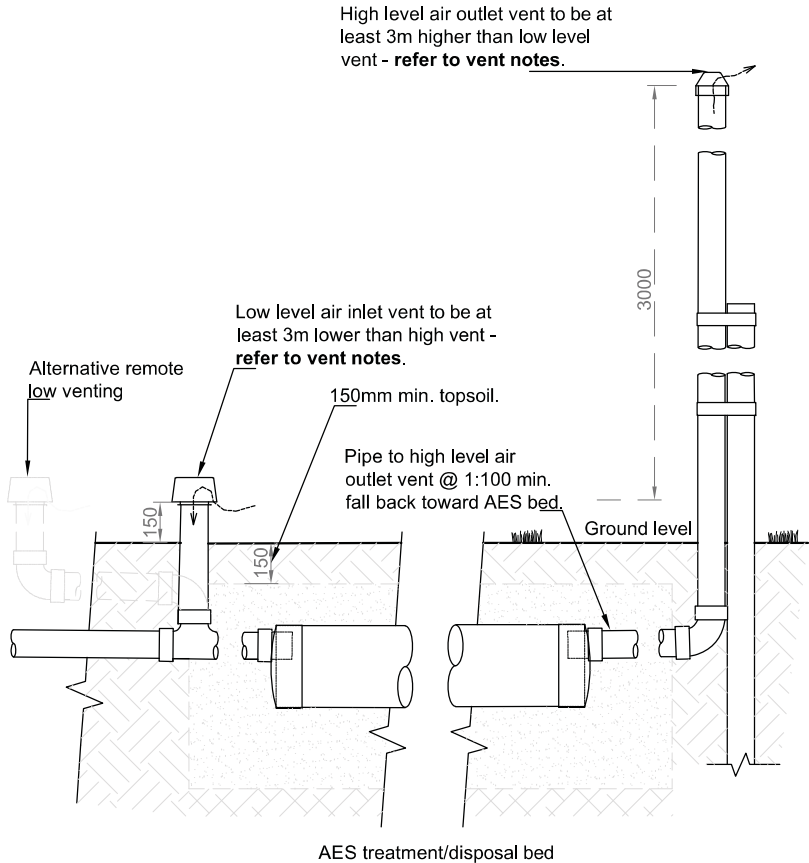
No.	Revision	Date	Name	Scale @A3	1:25
2	Notes altered - include vent pipework material, and theory reduced from 1:20 to 1:25	26/08/20	HO	Scale @A4	1:50
				Dwg: AES SB02	



NB. This generic drawing is the Copyright © of Environment Technology Ltd (Et). It is supplied by Et for use in New Zealand and may not address site specific aspects of an AES treatment system design. Use of this drawing as part of a design proposal must be in accordance with Et Copyright and conditions of use - available at <https://www.et.nz/discclaimer-and-copyright/>  
Each designer using this drawing for a design for a particular site: (a) Shall be solely responsible for the wastewater treatment system design for that site having regard to all the circumstances applying at that site and; (b) By using this generic material, the designer guarantees that Et shall have no liability for plans submitted by that designer to clients, local authorities or any other person.



Septic tank and dimensions as specified in AS/NZS1546.1:2008.



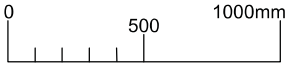
High level air outlet vent to be at least 3m higher than low level vent - refer to vent notes.

Low level air inlet vent to be at least 3m lower than high vent - refer to vent notes.

150mm min. topsoil.

Pipe to high level air outlet vent @ 1:100 min. fall back toward AES bed.

AES treatment/disposal bed



## NOTES

### General

- Advanced Enviro-Septic (AES) pipes, fittings and bed to be constructed/installed in accordance with the AES Installation Manual.
- AES pipes and fittings are supplied by Environment Technology Ltd, Et.
- All associated pipework to comply with NZ Building Code G13, Foul Water, Acceptable Solutions, relevant standards and local/regional council requirements.
- Unless otherwise stated all dimensions are in millimetres and all dimensions are minimums except pipe diameters and fittings.

### Venting of AES Pipework to Maintain Aerobic Internal Conditions

- The high level air outlet vent to be 100, 80, or 65mm diameter DWV pipe, suitably supported on an adjacent building or post, to be 3m vertically elevated above the low level air inlet vent. 2 x 50mm DWV pipe can be used in internal building framing. Support to be provided to 1 meter below the top of the DWV vent pipe.
- The low level air inlet vent to be 100mm DWV, positioned as close as practical to the AES bed and isolated with respect to air passage wherever practical from upstream influent pipework. Refer to the specific design of each project.
- The location of air inlet and outlet vents can be remote from the AES bed with additional pipework to suit topography, building structures or landscaping. The high level air outlet vent should be positioned considering potential downdrafts or adjacent disturbed air flows.


### AES Bed Construction

- An areal extension to the AES bed may be required to suit the permeability of the receiving soil in passive installations. These extensions may be on any or all sides of the bed. Refer to the AES bed dimensions noted on the specific design. N/A or not applicable denotes an extension is not required in this design.
- A minimum of 50mm of fall is required between the septic tank outlet invert and the invert of the inlet to the AES bed or distribution box.
- Trees/large shrubs cannot be planted on the AES bed.
- AES bed 'System Sand' specification is usually met with within the local concrete sand specification. Refer ET website [www.et.nz/system-sand-suppliers/](http://www.et.nz/system-sand-suppliers/) for Et tested AES System Sand suppliers. Et offers cost free sand sieve analysis upon receipt of a two cupful size sample.

### Riser Systems

- Riser systems come in varying shapes and sizes and can be sourced from a range of manufacturers. Environment Technology stock and recommend Tuf-Tite riser systems.

## LONG SECTION

DESIGNED BY EmilyThompson CookCostello	PROJECT Lot 1 DP 567901, Taupo Bay, Far North, Northland.	DRAWING TITLE  AES Bed and Septic Tank Air Venting Detail	No.	Revision	Date	Name	Scale @A3	1:20
			2	Additional notes added.	03/04/20	HO	Scale @A4	1:40
							Dwg: AES VC	
			 Environment Technology sustainable wastewater treatment info@et.nz - www.et.nz					



## NOTES

**General**


- Advanced Enviro-Septic (AES) pipes, fittings and bed to be constructed/installed in accordance with the AES Installation Manual.
- AES pipes and fittings are supplied by Environment Technology Ltd, Et.
- All associated pipework to comply with NZ Building Code G13, Foul Water, Acceptable Solutions, relevant standards and local/regional council requirements.
- Unless otherwise stated all dimensions are in millimetres and all dimensions are minimums except pipe diameters and fittings.

**Venting of AES Pipework to Maintain Aerobic Internal Conditions**

- The high level air outlet vent to be 100, 80, or 65mm diameter DWV pipe, suitably supported on an adjacent building or post, to be 3m vertically elevated above the low level air inlet vent, 2 x 50mm DWV pipe can be used in internal building framing. Support to be provided to 1 meter below the top of the DWV vent pipe.
- The low level air inlet vent to be 100mm DWV, positioned as close as practical to the AES bed and isolated with respect to air passage wherever practical from upstream influent pipework. Refer to the specific design of each project.
- The location of air inlet and outlet vents can be remote from the AES bed with additional pipework to suit topography, building structures or landscaping. The high level air outlet vent should be positioned considering potential downdrafts or adjacent disturbed air flows.

**AES Bed Construction**

- An areal extension to the AES bed may be required to suit the permeability of the receiving soil in passive installations. These extensions may be on any or all sides of the bed. Refer to the AES bed dimensions noted on the specific design. N/A or not applicable denotes an extension is not required in this design.
- A minimum of 50mm of fall is required between the septic tank outlet invert and the invert of the inlet to the AES bed or distribution box.
- Trees/large shrubs cannot be planted on the AES bed.
- AES bed 'System Sand' specification is usually met with within the local concrete sand specification. Refer ET website [www.et.nz/system-sand-suppliers/](http://www.et.nz/system-sand-suppliers/) for ET tested AES System Sand suppliers. Et offers cost free sand sieve analysis upon receipt of a two cupful size sample.

DESIGNED BY EmilyThompson CookCostello	PROJECT Lot 1 DP 567902, Taupo Bay, Far North, Northland	DRAWING TITLE  AES System Details Sheet	No.	Revision	Date	Name	Scale @A3	1:40 & 1:20	<div> EnvironmentTechnology sustainable wastewater treatment  info@et.nz - www.et.nz</div> <div>NB. This generic drawing is the Copyright © of Environment Technology Ltd (Et). It is supplied by Et for use in New Zealand and may not address site specific aspects of an AES treatment system design. Use of this drawing as part of a design proposal must be in accordance with Et Copyright and conditions of use - available at <a href="https://www.et.nz/discclaimer-and-copyright/">https://www.et.nz/discclaimer-and-copyright/</a> Each designer using this drawing for a design for a particular site: (a) Shall be solely responsible for the wastewater treatment system design for that site having regard to all the circumstances applying at that site and; (b) By using this generic material, the designer guarantees that Et shall have no liability for plans submitted by that designer to clients, local authorities or any other person.</div>
			2	Changed technical format.	31/03/20	HO	Scale @A4	1:20 & 1:10	
							Dwg: AES DET01		



**cook | costello**

## Geotechnical Report

Jason Friendlander c/o Stevens Lawsons Architects

---

1025 Taupo Bay Road

Taupo Bay



Project Number: 107622

Date: 20/03/2025



## DOCUMENT CONTROL RECORD

**Client:** Jason Friendlander c/o Architects

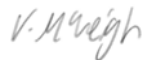
**Project description:** Geotechnical Report

**Client address:** 1025 Taupo Bay Road, Taupo Bay

**Date of issue:** Thursday, 20 March 2025

**Status:** Issued

**Originators:**



Jasmin McVeigh  
**Geologist (Graduate)**  
BSc (Geology)

**Approved for issue:**



PJ Cook  
**Chartered Professional Engineer**  
MACENZ, CMEngNZ, MInstD, CPEng, IntPE (NZ)  
BE (Hons), Dip Ag.

**Office of origin:** Whangarei

**Telephone:** 09 438 9529

**Contact email:** [ccl@coco.co.nz](mailto:ccl@coco.co.nz)

Version	Date	Comment	By
1.0	13 <sup>th</sup> March 2025	For review	JMV
1.0	20 <sup>th</sup> March 2025	Approval	P.Cook

## Table of Contents

1. Executive Summary.....	5
2. Introduction.....	6
2.1. Relevant Documentation .....	6
2.2. The Building Code – B1 Good ground definition.....	7
3. Desktop Study .....	8
3.1. Site Description .....	8
3.2. Proposed Development.....	8
3.3. Published Geology .....	9
3.4. Hazards .....	10
4. Onsite Investigations .....	13
4.1. Site Investigations .....	13
4.2. Site Walkover Observations .....	13
4.3. Hand Auger Investigations .....	13
4.4. Scala Penetrometer Investigations.....	14
4.5. Water Table .....	15
5. Geotechnical Assessment.....	16
5.1. Site Subsoil Profile .....	16
5.2. Site Subsoil Classification .....	16
5.3. Slope Stability Analysis .....	16
5.4. Liquefaction .....	16
6. Foundation recommendations.....	17
6.1. Expansive Soils .....	17
6.2. Shallow Foundations .....	17
6.3. Pile Foundations.....	18
6.4. Earthworks.....	19
7. Conclusions .....	20
8. Limitations.....	22
Appendix 1 Conceptual plans.....	23
Appendix 2: Site testing locations .....	24
Appendix 3: Site Testing Results .....	25



## List of Tables

Table 1: Summary of Hand Auger results. ....	13
Table 2: Summary of uncorrected ultimate bearing capacities identified at each SP location. ....	14
Table 3: Subsoil profile based on the shallow soil investigations, yoga studio. ....	16
Table 4: Subsoil profile based on the shallow soil investigations, garage. ....	16
Table 5: Subsoil profile based on the shallow soil investigations, extension to living room. ....	16
Table 6: Soil parameters for pile foundation design. ....	18

## List of Figures

Figure 1: Image displaying approximate site location, extent and proposed extension locations, Northland Regional Council. ....	8
Figure 2: Conceptual plans indicating the location of the proposed development. ....	9
Figure 3: Size and Extent of the Lot on a 1 m Contour map, QGIS. ....	9
Figure 4: Geology of the site from GNS 1:250000 Geological Map of New Zealand. ....	10
Figure 5: NRC Hazards Map, River Flood extent. ....	11
Figure 6: NRC Hazards Map, Coastal Flooding zone (0-4). ....	12
Figure 7: NRC Hazard Map, Tsunami Hazard. ....	12

## 1. Executive Summary

### Site Classification:

NZ Building Code Expansive Soil Class	H – Highly Expansive Soils
NZS1170.5	C – Shallow Soil Site

### Groundwater Level:

CPT at location of the proposed bedroom location:	>9.8 mbgl (assumed, GWT not encountered)
---	--

### Bearing Capacity Summary:

Depth to 200kPa Uncorrected Ultimate Bearing Capacity:	1.1 mbgl
Depth to 300kPa Uncorrected Ultimate Bearing Capacity:	1.2 mbgl

### Site Foundation Options for garage:

<b>Shallow Foundations:</b>	Shallow foundations are suitable. Foundations will require specific engineer design for Class H – Highly expansive soils. Foundations can be designed for a UBC of 200 kPa or 300 kPa and founded at a depth of 0.1 m or 0.2 m respectively, below the existing ground level, below any topsoil identified across the site.
<b>Pile Foundations:</b>	Bored or driven pile foundations are recommended for the proposed development.  Specific engineer designed (SED) timber piles embedded a minimum of 1.5 mbgl, adhering to NZ Building code B1/VM4.  Downslope piles need to consider the top 0.75 m of ground embedment for loss of support due to long-term creep. Downslope pile spacing shall be no more than 3.5 times the diameter or 1.2 m, whichever is the lesser.

### Site Foundation Options for yoga studio:

<b>Shallow Foundations:</b>	Shallow foundations are suitable. Foundations will require specific engineer design for Class H – Highly expansive soils.  Foundations can be designed for a UBC of 200 kPa or 300 kPa and founded at a depth of 1.1 m or 1.2 m below the existing ground level, below any topsoil identified across the site, respectively.
<b>Pile Foundations:</b>	Bored or driven pile foundations are recommended for the proposed development.  Specific engineer designed (SED) timber piles embedded a minimum of 1.5 mbgl, adhering to NZ Building code B1/VM4.

### Site Foundation Options for lounge extension:

<b>Pile Foundations:</b>	Bored or driven pile foundations are recommended for the proposed development.  Specific engineer designed (SED) timber piles embedded a minimum of 1.5 mbgl, adhering to NZ Building code B1/VM4.  Downslope piles need an embedment of 3.0 m and consider the top 0.75 m of ground embedment for loss of support due to long-term creep. Downslope pile spacing shall be no more than 3.5 times the diameter or 1.2 m, whichever is the lesser.
--------------------------	---



## 2. Introduction

Cook Costello has been engaged by Jason Friedlander to provide a Geotechnical Report for use in support of a Building and Resource Consent application with the Far North District Council.

The client proposes to construct a single-storey detached garage, a yoga studio, an extension to the existing dwelling, and two additional bedrooms with en-suites on the property. Cook Costello has received preliminary conceptual plans for the development.

This report pertains to the geotechnical investigation conducted for the garage, yoga studio, and dwelling extension. A separate report has been prepared for the two additional bedrooms.

This report considers the following aspects of site development:

- Desktop investigation;
- Existing stability of the site;
- Interpretation of test results;
- Effects of the development on stability;
- Suitable building platforms and foundations;

A site testing plan is attached as Appendix 2 showing the property boundary, and associated site investigations within the footprint of the proposed new dwelling.

### 2.1. Relevant Documentation

- AS 2870: 2011 - Construction of residential slabs and footings
- NZS 1170.5:2004 – Structural design actions
- NZS 3604: 2011 - Timber-framed buildings
- NZS 4402:1986 - Methods of testing soils for civil engineering purposes
- New Zealand Build Code B1/VM4
- Northland Regional Council: GIS Maps
- Northland Regional Council Proposed Regional Plan
- Resource Management Act 1991
- Far North District Council District Plan
- Far North District Council Engineering Standards and Guidelines
- Cook Costello Geotechnical Report 1025 Taupo Bay Road, project number 10505-001 dated 14 July 2020.

## 2.2. The Building Code – B1 Good ground definition

The requirement for specific engineer design is dependent on whether or not the site subsoils fall within the NZS3604:2011 definition of 'good ground'. 'Good ground' – means any soil or rock capable of permanently withstanding an ultimate bearing pressure of 300 kPa (i.e. a dependable bearing capacity of 150 kPa using a reduction factor of 0.5) but excludes;

- a) Potentially compressible ground such as topsoil, soft soils such as clay which can be moulded easily in the fingers, and uncompacted loose gravel which contains obvious voids,
- b) Expansive soils being those that have a liquid limit of more than 50% when tested in accordance with NZS4402 Test 2.2 and linear shrinkage of more than 15% when tested from the liquid limit in accordance with NZS 4402 Test 2.6 and,
- c) Any ground which could foreseeably experience a movement of 25 mm or greater for any reason including one or a combination of the following: land instability, ground creep, subsidence, seasonal swelling and shrinking, frost heave, changing groundwater level, erosion, dissolution of soil in water, and effects of tree roots.



### 3. Desktop Study

#### 3.1. Site Description

The property is located at 1025 Taupo Bay Road in Taupo Bay and has the legal description of Lot 1 DP 567902. The property is situated on a ridgeline above Taupo Bay Beach. The property slopes steeply toward the east and south with a vegetated slope. The area surrounding the proposed extensions has a slope of approximately 20°. The proposed building location is mostly covered in grass. To the eastern side of the dwelling, the property is covered with trees. The size and extent of the property along with approximate build location can be seen in Figure 1. The size and extent of the property can be seen in Figure 3 on a 1 m contour map of the property.



Figure 1: Image displaying approximate site location, extent and proposed extension locations, Northland Regional Council.

#### 3.2. Proposed Development

The client plans to add an extension to the existing living room, two additional bedrooms, a yoga room, and a garage to the property at Taupo Bay Road, Taupo Bay (Lot 1 DP 567902). This report provides information for the development of the garage, yoga studio, and living room extension. Cook Costello has received the conceptual floor plans and scheme plans for the proposed development. A conceptual plan is shown below in Figure 2. Refer Figure 3 for a contour map displaying the approximate size and extent of the property. The conceptual plans provided by the client has been attached in Appendix 1.



Figure 2: Conceptual plans indicating the location of the proposed development.

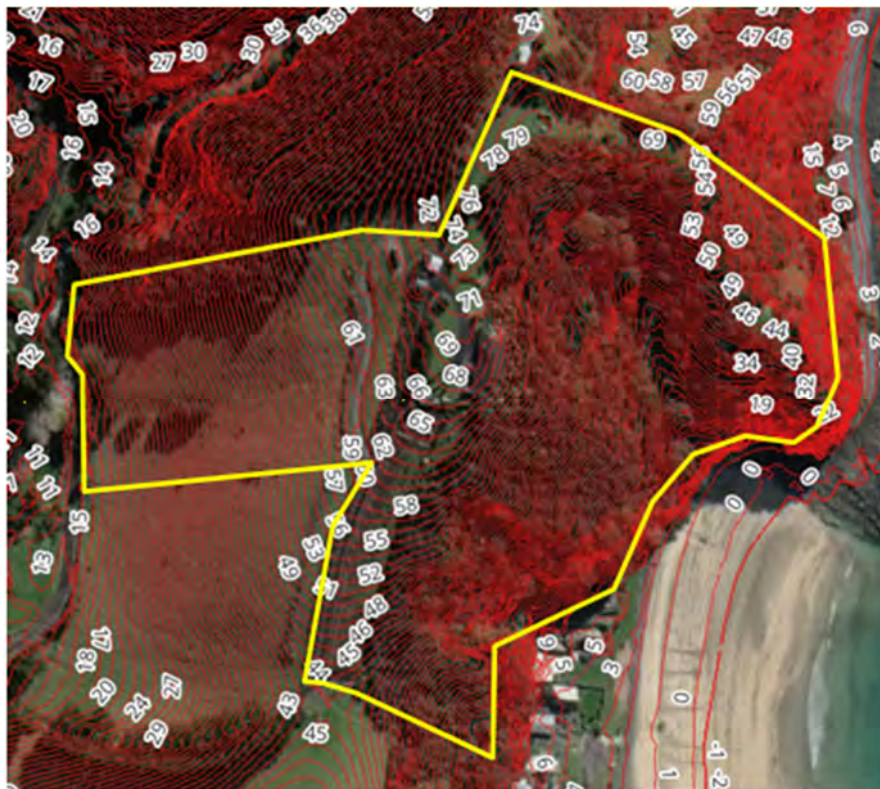


Figure 3: Size and Extent of the Lot on a 1 m Contour map, QGIS.

### 3.3. Published Geology

The 1:250,000 GNS Science online geology map (**Error! Reference source not found.**) defines the underlying geology of the site as comprising of Tupou Complex in Northland Allochthon. Tupou Complex is one of the many variations of the Northland Allochthon consisting of strongly indurated, poorly stratified conglomerate, sandstone and argillite. Towards the east at the lower elevations, there is a geological boundary comprising of (Holocene) river deposits & ocean beach deposits of Kariotiahi.



The soil type across the property is mapped on the Northland Regional Council's Soil factsheet viewer as Rangiora clay, clay loam and silty clay loam (RAH). Rangiora loams are mature greywacke soils that can be prone to large-scale slipping. The greywacke basement rock is weathered up to 30 m producing Rangiora loams.

However, these are regionally scaled documents and should not be relied on for site-specific acceptance.



Figure 4:Geology of the site from GNS 1:250000 Geological Map of New Zealand.

### 3.4. Hazards

Northland Regional Council has mapped 10-, 50-, and 100-year extent river flood surrounding the property (**Error! Reference source not found.**). There is also coastal flood hazard zones surrounding the property, which are mapped from zone 0-4 (Figure 6). These zones do not interact with the proposed development.

The areas of the proposed additions are mapped as tsunami safe area (**Error! Reference source not found.**). The western, southern and eastern sides of the property are mapped as a yellow tsunami zone. Slope stability is not mapped by the Northland Regional Council. As per engineered judgement, Northland Allochthon has a high slope instability potential for  $>18^\circ$ .

The property has not been mapped for any other natural hazards.



Figure 5: NRC Hazards Map, River Flood extent





Figure 6: NRC Hazards Map, Coastal Flooding zone (0-4).



Figure 7: NRC Hazard Map, Tsunami Hazard.

## 4. Onsite Investigations

### 4.1. Site Investigations

Site investigation was undertaken by Geocivil under the supervision of a Cook Costello Engineer, on 25<sup>th</sup> February and 4<sup>th</sup> March 2025. The following intrusive investigations were conducted at the site:

- 3 No. Hand Augers
- 10 No. Scala Penetrometer

Test locations can be found in Appendix 2. Detailed results can be found in Appendix 3

### 4.2. Site Walkover Observations

A site walkover was carried out by a Cook Costello Geotechnical Engineer on 20 February 2025. The following observations were noted:

- The proposed build site is accessed from Taupo Bay Road via a steep paved driveway.
- There is a row of large mature pine trees parallel to the driveway.
- The proposed build site is gently sloping towards the south west.
- The site is mostly covered in short grass.
- Some areas on site has longer grass
- There is a range of mature trees across the site
- The soil across the site is dry.

### 4.3. Hand Auger Investigations

The results from the hand auger investigations carried out at the site are summarised in Table 1. The location of the tests can be found in Appendix 2. For detailed logs and testing results refer to Appendix 3.

Table 1: Summary of Hand Auger results.

Test ID	Depth (mbgl) <sup>1</sup>	GWL <sup>2</sup> (mbgl)	Test Results		
			(mbgl)	Soil Type	Vane Shear Strength Max/Residual (kPa)
HA01	3.0 (Target)	>3.0 (not encountered)	0.0 – 0.2	TOPSOIL	-
			0.2 – 1.0	Clayey SILT	UTP @ 0.5m 220+ @ 1.0m
			1.0– 3.0	Silty CLAY	157/35 @ 1.5m 126/25 @ 2.0m 167/66 @ 2.5m 141/53 @ 3.0m
HA02	3.0 (Target)	>3.0 (not encountered)	0.0 – 0.3	SILT	-



Test ID	Depth (mbgl) <sup>1</sup>	GWL <sup>2</sup> (mbgl)	Test Results		
			(mbgl)	Soil Type	Vane Shear Strength Max/Residual (kPa)
			0.3 – 3.0	Silty CLAY	154/31 @ 0.5m 129/50 @ 1.0 m 173/69 @ 1.5 m 220+ @ 2.0 m 157/38 @ 2.5 m 82/28 @ 3.0 m
HA05	1.5 (no recovery)	>1.5 (not encountered)	0.0-0.2	TOPSOIL	-
			0.2-1.5	Silty CLAY	222+ @ 0.5 m 155/35 @ 1.0m 168/60 @ 1.5m

1. mbgl = Meters below ground level  
2. GWL = Groundwater level

#### 4.4. Scala Penetrometer Investigations

Scala penetrometer results show that an ultimate bearing capacity (UBC) is in excess of 200 kPa (100 kPa dependable) from approximately 1.1 m below the existing ground level across the site, below any topsoil. An ultimate bearing capacity is in excess of 300 kPa (150 kPa dependable) from approximately 1.2 m below the existing ground level, below any topsoil. For a summary of the UBC observed across the site refer to Table 2.

Uncorrected bearing capacities derived from Scala penetrometer tests were estimated using the procedure presented by M.J. Stockwell in the paper 'Determination of allowable bearing pressure under small structures (June 1977)'. Bearing capacities should be corrected for the proposed foundation dimensions once these are known.

Table 2: Summary of uncorrected ultimate bearing capacities identified at each SP location.

Test ID	Depth Below Ground (m)	Scala Penetrometer (blows/100mm)	Uncorrected Ultimate Bearing Capacity (kPa)
SP01	0.1	2	>200
	0.1	3	>300
SP02	0.1	2	>200
	0.1	3	>300
SP03	1.1	2	>200
	1.2	3	>300
SP04	0.1	2	>200
	0.2	3	>300
SP05	0.1	2	>200
	0.1	3	>300
SP06	0.3	2	>200

Test ID	Depth Below Ground (m)	Scala Penetrometer (blows/100mm)	Uncorrected Ultimate Bearing Capacity (kPa)
	0.4	3	>300
SP14	0.3	2	>200
	0.4	3	>300
SP15	0.1	2	>200
	0.1	3	>300
SP16	0.2	2	>200
	0.3	3	>300
SP17	0.3	2	>200
	0.4	3	>300

#### 4.5. Water Table

The groundwater table was not encountered during the CPT conducted at the location of the proposed bedroom location, which extends to a maximum depth of 10.70 mbgl. Due to seasonal changes to groundwater, the groundwater table would be >9.8mbgl in the wetter seasons.



## 5. Geotechnical Assessment

### 5.1. Site Subsoil Profile

The subsoil profile for the proposed building platform is dominated by CLAY with some SILT. For a basic geological interpretation based on shallow geotechnical investigations refer to Table 3 and Table 4.

Table 3: Subsoil profile based on the shallow soil investigations, yoga studio.

Depth Ranges (mbgl)	Geological Interpretation
0.0 – 0.2	Soft <b>TOPSOIL</b>
0.2 – 1.0	Firm <b>SILT</b>
1.0-3.0	Stiff silty <b>CLAY</b>

Table 4: Subsoil profile based on the shallow soil investigations, garage.

Depth Ranges (mbgl)	Geological Interpretation
0.0 – 0.3	<b>SILT</b>
0.3– 3.0	Stiff silty <b>CLAY</b>

Table 5: Subsoil profile based on the shallow soil investigations, extension to living room.

Depth Ranges (mbgl)	Geological Interpretation
0.0 – 0.2	<b>TOPSOIL</b>
0.2– 1.5	Stiff Silty <b>CLAY</b>

### 5.2. Site Subsoil Classification

The general soils encountered across the site are consistent with the site subsoil classification Class C – Shallow Soil sites as per NZS1170.5 -2005.

### 5.3. Slope Stability Analysis

A numerical slope stability analysis has not been performed due to the proposed building location of the yoga studio being relatively flat and the proposed site for the garage is gently sloping with a slope of approximately 8°. We believe the proposed development is unlikely to affect the stability of this site.

### 5.4. Liquefaction

A liquefaction assessment has not been carried out based on site investigations, no water table was found in the CPT to 10.7 m. The soil type found across this site is CLAY and silty CLAY. Due to this, the site is unlikely to liquefy as liquefaction only occurs in saturated soils.

## 6. Foundation recommendations

### 6.1. Expansive Soils

Many of the soils located within the Northland region are considered to be expansive soils. There are three basic types of soil naturally occurring in the Northland Area: sand, silt, and clay. Clay soils are generally classified as "expansive". This means that a given amount of clay will tend to expand (increase in volume) as it absorbs water and it will shrink (lessen in volume) as water is drawn away. The action of seasonal shrink/swell of soils can have a significant impact on the foundations of structures and also on other components of developments such as services, claddings, windows, doors, roading, etc. It is evident from historical reports and site inspections that the effect of expansive soils is a major problem in Northland.

Based on previous site investigations at a neighbouring property at 1025 Taupo Bay, laboratory tests carried out show the site is classified as H (highly expansive) and are likely to be shrink-swell effects. Therefore, it is considered that the building site does not meet the requirements for "Good Ground" as defined in the New Zealand Building Code and standard NZS3604 foundations are not suitable for this site. Foundations will require engineering design in accordance with NZ Building Code for class 'H' soils (Highly Expansive Soils). Specific design for expansive soils has to be taken into account in the foundation design.

We, therefore, consider that the site should be classified as Class H in terms of New Zealand Building Code B1/AS1 (Amendment 19). Foundations should be designed in accordance with NZ Building Code – B1 for a characteristic surface movement of 78 mm.

### 6.2. Shallow Foundations

Shallow foundations are suitable for the proposed building site. Shallow foundations can only be implemented if a flat building platform is constructed prior to shallow foundation installation.

Scala penetrometer results in the area surrounding the site of the proposed garage show that an Ultimate Bearing Capacity (UBC) in excess of 200 kPa (100 kPa dependable) is available from approximately 0.1 m below the existing ground level, below any topsoil or fill. An UBC is in excess of 300 kPa (150 kPa dependable) from approximately 0.2 m below the existing ground level, below any topsoil or fill.

Therefore, shallow foundations can be designed for a UBC of 200 kPa or 300 kPa if founded at 0.1 m or 0.2 m below the existing ground level, below any topsoil across the site respectively. Earthworks in the form of local undercut would be required to achieve the required founding levels, if it is desired to maintain the existing ground level, the undercut could be backfilled with compacted hardfill.

Scala penetrometer results in the area surrounding the site of the proposed yoga studio show that an Ultimate Bearing Capacity (UBC) in excess of 200 kPa (100 kPa dependable) is available from approximately 1.1 m below the existing ground level, below any topsoil or fill. An UBC is in excess of 300 kPa (150 kPa dependable) from approximately 1.2 m below the existing ground level, below any topsoil or fill.



Therefore, shallow foundations can be designed for a UBC of 200 kPa or 300 kPa if founded at 1.1 m or 1.2 m below the existing ground level, below any topsoil across the site respectively. Earthworks in the form of local undercut would be required to achieve the required founding levels, if it is desired to maintain the existing ground level, the undercut could be backfilled with compacted hardfill.

In order to mitigate the effects of expansive soils for a slab foundation, we recommend designing a stiffened concrete slab (e.g. RibRaft) specifically designed (SED) in accordance with AS2870 and NZ Building Code Clause B1 Class 'H' soils for a characteristic surface movement of 78 mm. Further design will be needed at the detailed design stage.

### 6.3. Pile Foundations

Specifically designed bored or driven pile foundations are suitable and recommended for the proposed development.

In order to mitigate the effects of expansive soils, we recommend designing the piles to be embedded a minimum of 1.5 m below the existing ground level, below any topsoil. At this depth, it is considered to be below the effects of seasonal moisture variations that cause the expansive soils to shrink and swell, inducing uplift forces on the piles. The piles should be founded in the stiff CLAY encountered.

Piled foundation design should be carried out in accordance with NZ Building Code B1/VM4 . Pile design is to be carried out by a suitably qualified engineer utilising the parameters in Table 6 .

Table 6: Soil parameters for pile foundation design.

Soil Type	Depths(m)	Unit weight, $\gamma$ (kN/m <sup>3</sup> )	Effective cohesion $c'$ (kPa)	Undrained shear strength (kPa)	Effective Angle of internal friction, $\phi'$ (°)	Bored Skin Friction(kPa)	Driven skin friction (kPa)
SILT	0.0-1.0	17.5	3	75	30	45	45
Silty CLAY	1.0-1.2	17.5	3	75	30	45	45
Silty CLAY	1.2-1.6	19	5	160	32	64	40
Silty CLAY	1.6-3.0	19.5	10	200	34	80	50

Downslope piles need an embedment of 3.0 m at the lounge location and consider the top 1.2 m of ground embedment for loss of support due to long-term creep. Downslope pile spacing shall be no more than 3.5 times the diameter or 1.2 m, whichever is the lesser.

#### 6.4. Earthworks

Any earthworks conducted at the site should be undertaken and tested in accordance with NZS4431:2022

- All engineered or structural hardfill should be placed in  $\leq 200$  mm lifts and be compacted to a minimum of 95% of maximum dry density, at no less than optimum moisture content. Compaction should be achieved using standard plant and methodology suitable for the imported material. A water source should be maintained on-site for moisture control. The fill must be tested and certified in accordance with NZS4431 if the thickness exceeds 300 mm and monitored by a suitably qualified engineer. Fill may be battered down to the natural ground at a maximum grade of 2H to 1V if possible. Alternatively, any compacted fill on-site should be retained by retaining structures.
- Wherever filling or soft native ground is present at foundation level it should be undercut and replaced with approved compacted hardfill. Its suitability or otherwise as a bearing material beneath the floor slab should be determined on-site by the Engineer.
- Compacted hard FILL beneath the building platform exceeding a depth of 300 mm will require testing and certification by a suitably qualified engineer.
- Compacted fill will require compaction testing every 600 mm lift.
- All temporary cuts during the construction phase should have an angle of no greater than 2H:1V
- Where site-won fill is proposed to be used as hard FILL material, this material must be approved for use by a suitably qualified geotechnical engineer.

It is recommended that a geotechnical engineer is on-site during excavation to confirm subsurface material and ensure that ground conditions are as per Cook Costello's geotechnical report. We would be in a position to comment if the ground conditions varied from those described in this report.



## 7. Conclusions

Geotechnical investigations indicate that the site is presently stable, and the subsoil properties have adequate strength parameters necessary for the proposed development provided that the recommendations made in this report are followed.

The development will need to be carried out in accordance with proper engineering practice and the following guidelines:

1. Soils are considered to be Highly Expansive, Class H soils as per NZ Building Code Clause B1. This means that the encountered clays may be prone to moderate volume changes (swelling and shrinking) that are directly related to changes in water content. Shrinkable soils are a significant risk to foundations. Expansive soils fall outside the definition of “good ground” according to NZS 3604:2011, therefore specific foundation design is required for the site.
2. The site meets the definition of Class C – Shallow soil sites as per NZS1170.5.
3. Scala penetrometer testing shows the >200kPa uncorrected ultimate bearing capacity is generally available from the existing ground level to 1.1 mbgl across the site.
4. Scala penetrometer testing shows the >300kPa uncorrected ultimate bearing capacity is generally available below 1.2 mbgl across the site.
5. Shallow foundations – SED stiffened concrete slab recommendations
  - a. Shallow foundations for the proposed garage can be designed for an uncorrected UBC of 200 kPa or 300 kPa if embedded at a minimum of 0.1 m or 0.2 m below the existing ground level and below any topsoil, respectively.
  - b. Shallow foundations for the proposed yoga studio can be designed for an uncorrected UBC of 200 kPa or 300 kPa if embedded at a minimum of 1.1 m or 1.2 m below the existing ground level and below any topsoil, respectively.
  - c. The shallow foundations shall be a SED stiffened concrete slab (e.g. RibRaft) specifically designed in accordance with AS2870 and NZ Building Code Clause B1 for Class ‘H’ soils for a characteristic surface movement of 78 mm.
6. Pile Foundations
  - a. Bored or driven pile foundations are suitable and recommended for the proposed development.
  - b. Piles are to be embedded a minimum of 1.5 m below the existing ground level into the stiff CLAY encountered.
  - c. For shaft capacity and lateral capacity of piles, the upper 0.75 mbgl should not be relied upon to provide any resistance due to the presence of expansive soils.
  - d. Piled foundation design should be carried out in accordance with NZ Building Code B1/VM4 utilising the parameters provided in this report.

- e. Design is to be carried out by a suitably qualified engineer.
- 7. Any earthworks conducted at the site should be undertaken and tested in accordance with NZS4431:2022. Compacted hardfill beneath the building platform exceeding a depth of 300 mm will require testing and certification by a suitably qualified engineer.
- 8. Further inspections will be required including stripped ground (undercut inspection), compaction testing if hardfill placement exceeds 300 mm, edge pile inspection, and pile inspections if this foundation method is selected.
- 9. The site is considered suitable for the proposed development provided the recommendations in this report are followed.

All work should be carried out under the guidance of a Chartered Professional Engineer with relevant geotechnical experience.



## 8. Limitations

This report has been prepared for the benefit of Jason Friendlander c/o Stevens Lawsons Architects as our clients with respect to a geotechnical investigation for building consent with the Far North District Council. It shall not be relied upon for any other purpose. The reliance by other parties on the information or opinions contained in this report shall, without our prior review and agreement in writing, be at such parties' sole risk.

Opinions and judgments expressed herein are based on our understanding and interpretation of current regulatory standards and should not be construed as legal opinions. Where opinions or judgments are to be relied on, they should be independently verified with appropriate legal advice. Any recommendations, opinions, or guidance provided by Cook Costello in this report are limited to technical engineering requirements and are not made under the Financial Advisers Act 2008.

Recommendations and opinions in this report are based on data from testing and observations undertaken on site. The nature and continuity of subsoil conditions away from the tests are inferred and it must be appreciated that actual conditions could vary considerably from the assumed model.

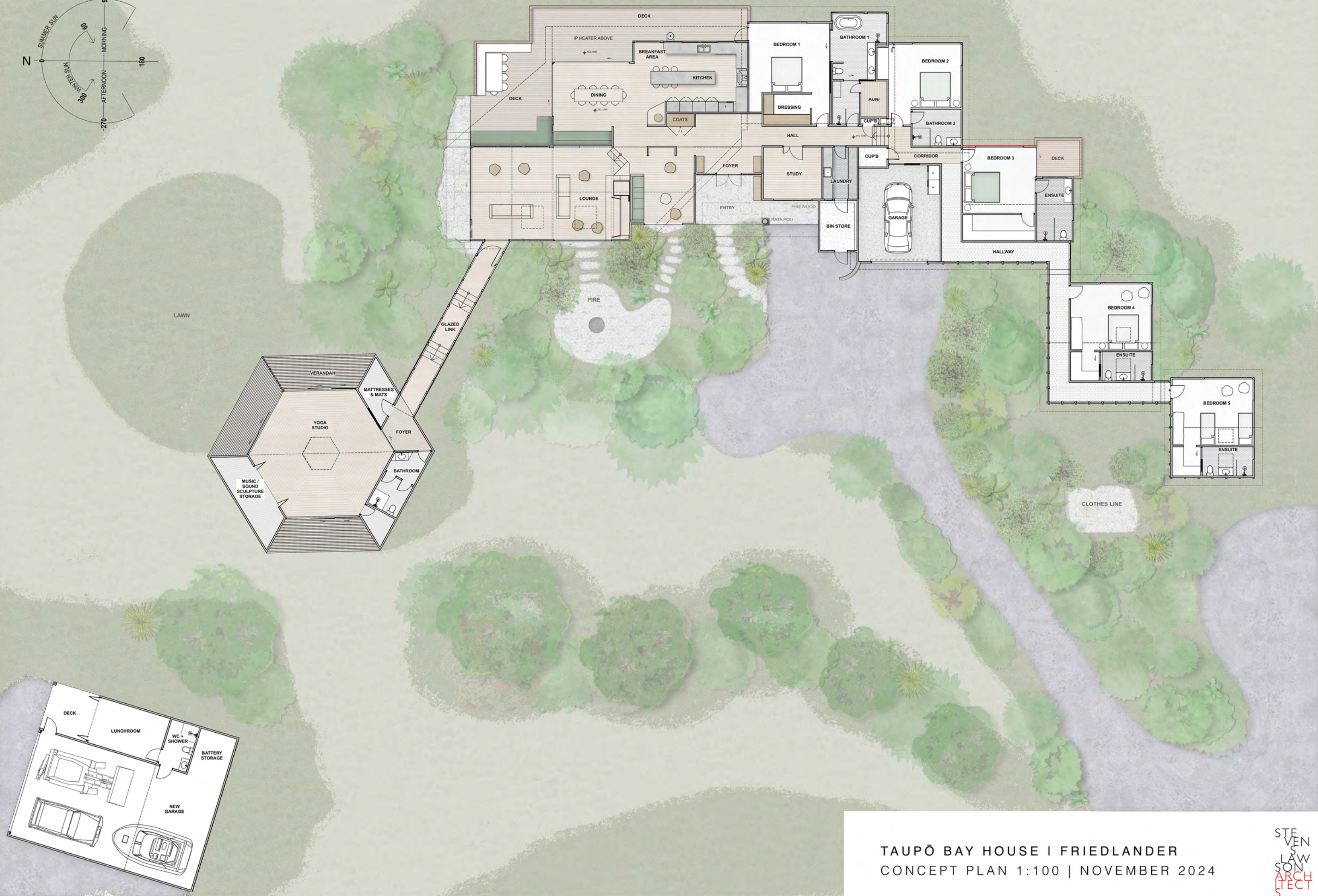
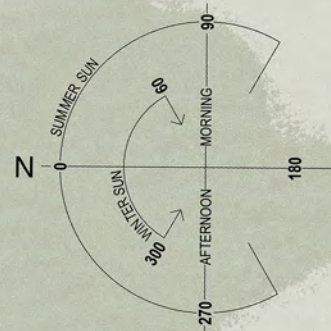
During excavation and construction, the site should be examined by a Cook Costello Engineer or Engineering Geologist to judge whether the exposed subsoils are compatible with the inferred conditions on which the report has been based. It is possible that the nature of the exposed subsoil may require further investigation and modification of the design based on this report. In any event, it is essential that the firm is notified if there is any variation in subsoil conditions from those described in the report as it may affect the design parameters recommended in the report.

Cook Costello has performed the services for this project in accordance with the standard agreement for consulting services and current professional standards for environmental site assessment. No guarantees are either expressed or implied.

There is no investigation that is thorough enough to preclude the presence of materials at the site which presently, or in the future, may be considered hazardous. Because regulatory evaluation criteria are constantly changing, concentrations of contaminants present and considered to be acceptable now may in the future become subject to different regulatory standards which cause them to become unacceptable and require further remediation for this site to be suitable for the existing or proposed land use activities.

## Appendix 1 Conceptual plans





TAUPŌ BAY HOUSE | FRIEDLANDER  
CONCEPT PLAN 1:100 | NOVEMBER 2024





PROPOSED  
EXISTING

TAUPŌ BAY HOUSE | FRIEDLANDER  
CONCEPT PLAN 1:100 | NOVEMBER 2024











































## Appendix 2: Site testing locations






LEGENDS

- ▲ Scala Penetrometer
- ⊗ Cone Penetration Test
- ⊕ Hand Auger with Scala Penetrometer Test
- Top Energy Power Line
- Cross Section A for Slide2
- Contours



NOT FOR CONSTRUCTION

 <b>cook   costello</b>	C			PROJECT DETAILS:  1025 TAUPU BAY ROAD, TAUPU BAY	DATE CREATED 07/02/2025	DRAWN SP	DESIGNED SP	APPROVED PC
	B				CCL REF NO 17622	SCALE 1:356	STATUS FOR INFORMATION	
	A	FIRST ISSUE	11/03/2025		TITLE:  SITE TESTING PLAN	DWG NUMBER DWG_17622_01	REVISION 01	
			SP			PC		
	REV.	REVISION DETAILS			DRAWN APP.			



## Appendix 3: Site Testing Results

## **TEST REPORT**

**PRELIMINARY**

**Lab Job No.:** 8020-1992

**Your Ref.:** -

**Date of Issue:** 13/03/2025

**Page:** 1 of 19

### **Test Report.**

### **No. WRE8020-1992-R002**

**PROJECT:** 1025 Taupo Bay

**CLIENT:** Cook Costello  
2 Norfolk Street,  
Whangarei, 0110

**ATTENTION:** Jasmin McVeigh

**INSTRUCTIONS:** Augerholes where required (not accredited)  
Determination of the penetration resistance using a dynamic cone (scala) penetrometer  
Hand Held Shear Vane Test

**TEST METHODS:** NZGS December 2005 (not accredited)  
NZS4402: 1988 Test 6.5.2  
NZGS: August 2001

**SAMPLING METHOD:** N/A

**TEST RESULTS:** As per laboratory sheets attached.

**Laboratory Technician**

**Approved Signatory**

**- CPT - Aggregates - Soil - Roading -**

This report shall not be reproduced except in full, without the written approval of the laboratory.



Tests indicated  
as not accredited  
are outside the  
scope of the  
laboratory's  
accreditation.



# AUGERHOLE LOG

PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation  
**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Borehole No.:** HA01/SP01  
**Hole Depth:** 3.00 m  
**Coordinates:**  
**Location:** 1025 Taupo Bay  
**Sheet:** 1 of 1  
**Date:** 25/02/25  
**Ground Level:**

Unit	Geological Interpretation In accordance with NZGS 2005	USCS	Legend	Depth (m)	Water	Vane Shear Strength (kPa)				Samples	
						Tested in accordance with NZGS Aug 2001					
						Scala Penetrometer NZS4402: 1988 Test 6.5.2 - Procedure 2 (blows / 50mm)					
						25 50 75 100 125 150 175 200 225	5 10 15 20	Blows	Peak Residual		
	silty TOPSOIL, traces of sands and gravels, brown, dry-moist	Pt			Groundwater Not Encountered						
	clayey SILT, traces of sands and gravels, brown, dry-moist, low plasticity, gravels; 7mm, subangular, fresh	ML									
	add orange streaking	ML		0.5							UTP
	add pink streakings	ML									
	silty CLAY, traces of sand and gravels, pink streaks light brown, moist, low plasticity	CL		1.0							220+
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
	add brown streaks	CL		2.0							126/25
		CL									
		CL									
		CL									
	add white specks	CL		2.5						167/66	
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									
		CL									

Remarks		Water		Investigation Type	
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>		<p>▼ Standing Water Level</p> <p>◁ Out flow</p> <p>▷ In flow</p>		<p><input type="checkbox"/> Hand Auger</p> <p><input checked="" type="checkbox"/> Hand Auger + Scala (DCP)</p>	
		<p><b>Contractor:</b> Geocivil</p> <p><b>Equipment:</b> Hand Auger and Scala</p> <p><b>Recorded By:</b></p> <p><b>Recorded Date:</b></p>		<p><b>Laboratory Technician:</b></p> <p><b>Approved Signatory:</b></p>	

# AUGERHOLE LOG

PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

**Borehole No.:** HA02/SP04  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**

Unit	Geological Interpretation In accordance with NZGS 2005	USCS	Legend	Depth (m)	Water	Relative Density	Vane Shear Strength (kPa) Tested in accordance with NZGS Aug 2001	Scala Penetrometer NZS4402: 1988 Test 6.5.2 - Procedure 2 (blows / 50mm)	Blows	Peak	Residual	Samples
	SILT, some clay, dry, brown, friable, low plasticity, traces of fine sand	ML	x x x x x									
	silty CLAY, moist, low to medium plasticity, brown with yellow brown mottling, traces of fine sand	CL	x x x x x	0.5								154/31
	silty CLAY, moist, dark black/brown, medium plasticity, traces of fine sand	CL	x x x x x	1.0								129/50
	silty CLAY, moist, yellowy brown, medium plasticity, traces of fine sand, low friable	CL	x x x x x	1.5								173/69
	silty CLAY, moist, red, reddish brown, medium plasticity, traces of fine sand, low friable	CL	x x x x x	2.0								220+
	silty CLAY, moist, red with white pink mottling, medium plasticity, low friable, traces of fine sand	CL	x x x x x	2.5								157/38
	End of Borehole (target depth)			3.0								82/28

Remarks	Water	Investigation Type
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>	<p>▼ Standing Water Level</p> <p>◁ Out flow</p> <p>▷ In flow</p>	<p><input type="checkbox"/> Hand Auger</p> <p><input checked="" type="checkbox"/> Hand Auger + Scala (DCP)</p>
<b>Contractor:</b>	<b>Equipment:</b>	<b>Recorded By:</b>
Geocivil	Hand Auger and Scala	J.H
		<b>Recorded Date:</b>
		25/02/2025
	<b>Laboratory Technician:</b>	<b>Approved Signatory:</b>



# AUGERHOLE LOG

PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation  
**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Borehole No.:** HA05/SP16  
**Hole Depth:** 3.00 m  
**Coordinates:**  
**Location:** 1025 Taupo Bay  
**Sheet:** 1 of 1  
**Date:** 25/02/25  
**Ground Level:**

Unit	Geological Interpretation In accordance with NZGS 2005	USCS	Legend	Depth (m)	Water	Vane Shear Strength (kPa)				Samples
						Tested in accordance with NZGS Aug 2001				
						Scala Penetrometer				
						NZS4402: 1988 Test 6.5.2 - Procedure 2 (blows / 50mm)				● Peak ○ Residual
						Blows				
						25 50 75 100 125 150 175 200 225				
						5 10 15 20				

## Remarks

Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test  
Note: Scala Penetrometer interpretation is not endorsed

Contractor:		Equipment:		Recorded By:		Laboratory Technician:		Approved Signatory:	
Geocivil		Hand Auger and Scala		M.A					
				Recorded Date:					
				25/02/2025					

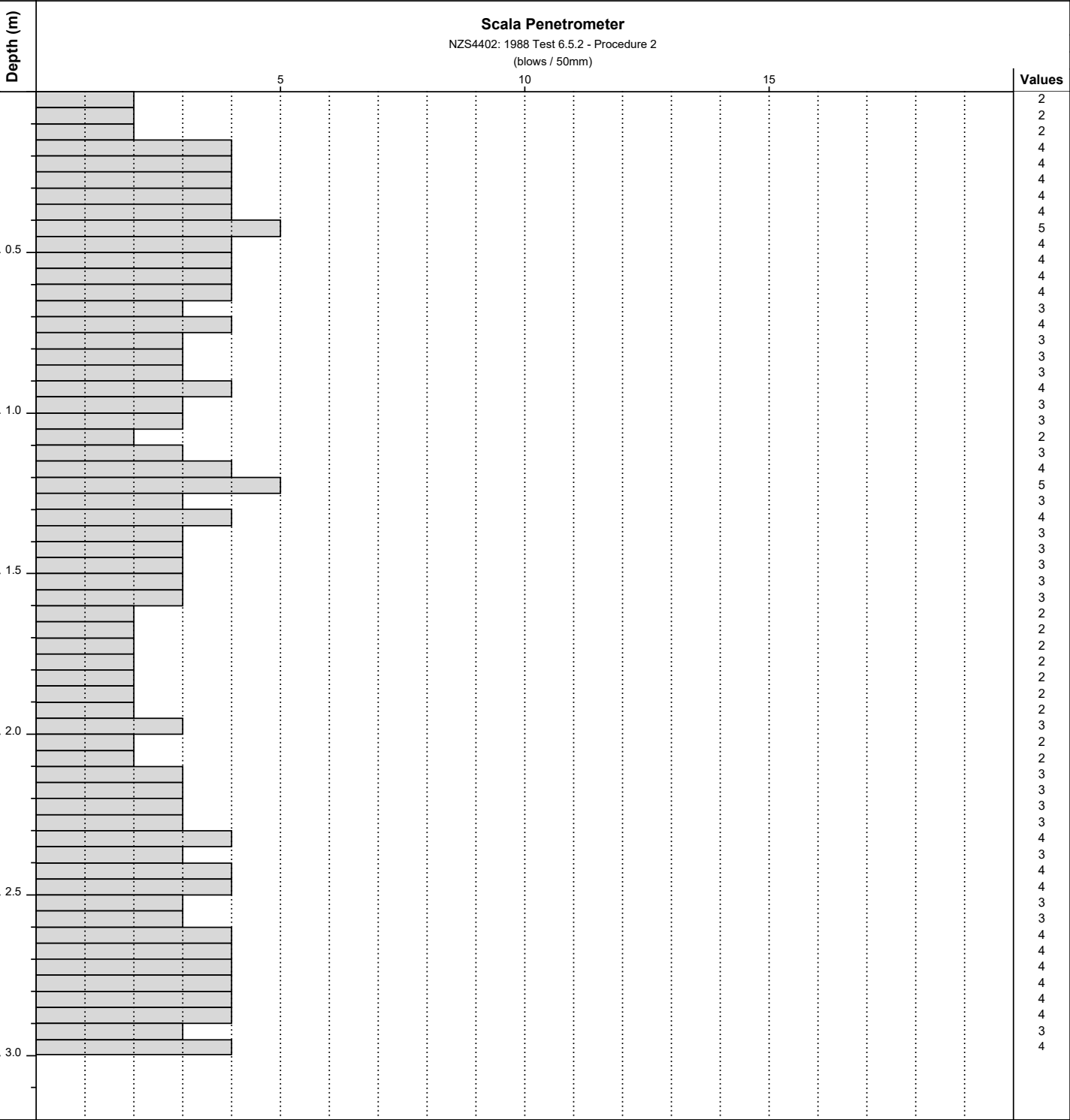


# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

Lab Job No.:	8020-1992	Test No.:	SP02	Sheet:	1 of 1
Client:	Cook Costello	Hole Depth:	3.00 m	Date:	25/02/25
Job:	Geotechnical Investigation	Coordinates:		Ground Level:	
Report No.:	WRE8020-1992-R002	Location:	1025 Taupo Bay		
Client Ref. No.:	-				



Remarks		Investigation Type	
		<input checked="" type="checkbox"/> Scala (DCP)	
<small>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test Note: Scala Penetrometer interpretation is not endorsed</small>			
Contractor:	Equipment:	Recorded By:	Laboratory Technician:
Geocivil	DCP	Recorded Date:	Approved Signatory:



# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

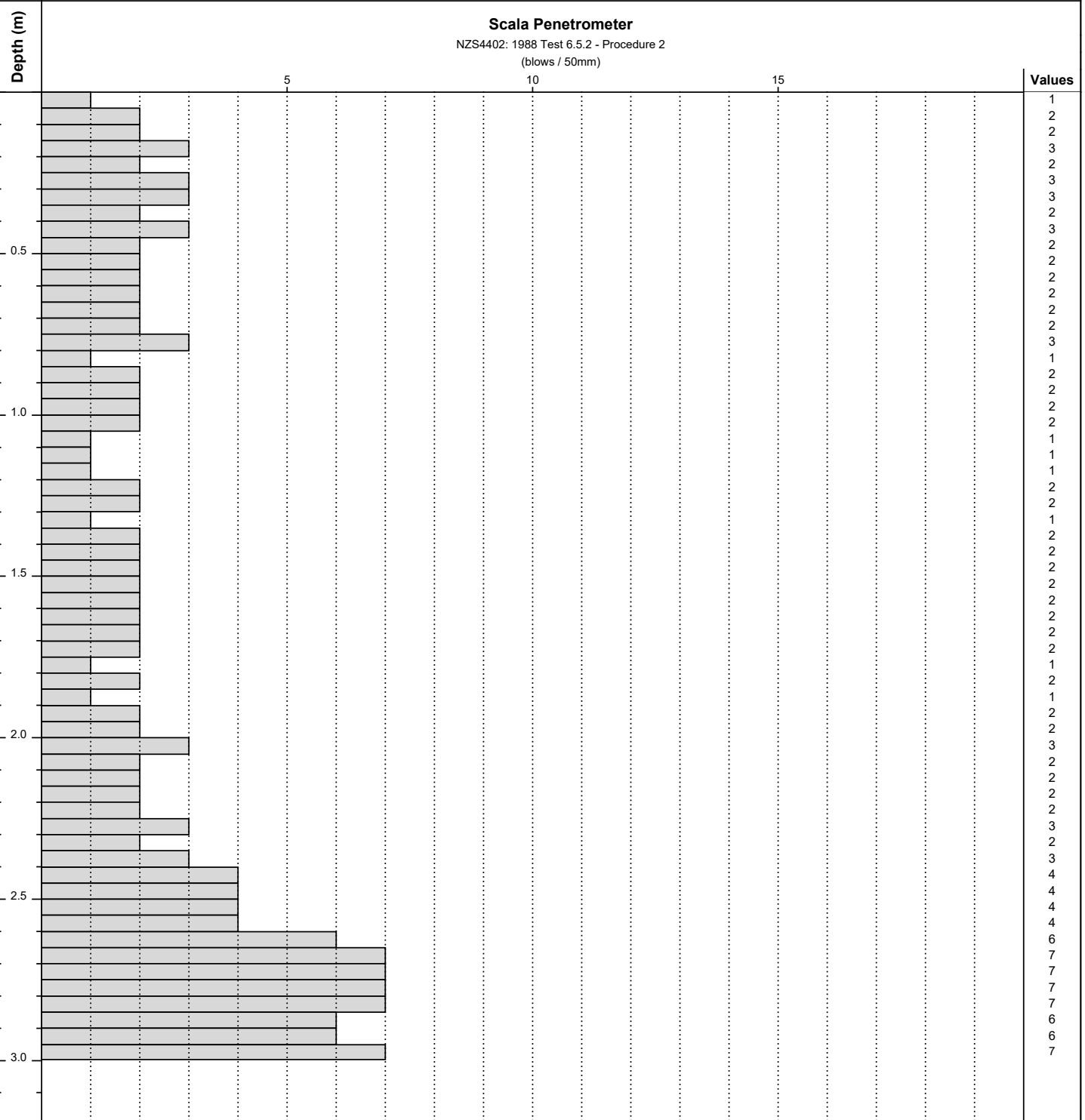
**Test No.:** SP03  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**



<b>Remarks</b>		<b>Investigation Type</b>	
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>		<input checked="" type="checkbox"/> Scala (DCP)	
<b>Contractor:</b>	<b>Equipment:</b>	<b>Recorded By:</b>	<b>Laboratory Technician:</b>
Geocivil	DCP	<b>Recorded Date:</b>	<b>Approved Signatory:</b>

# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

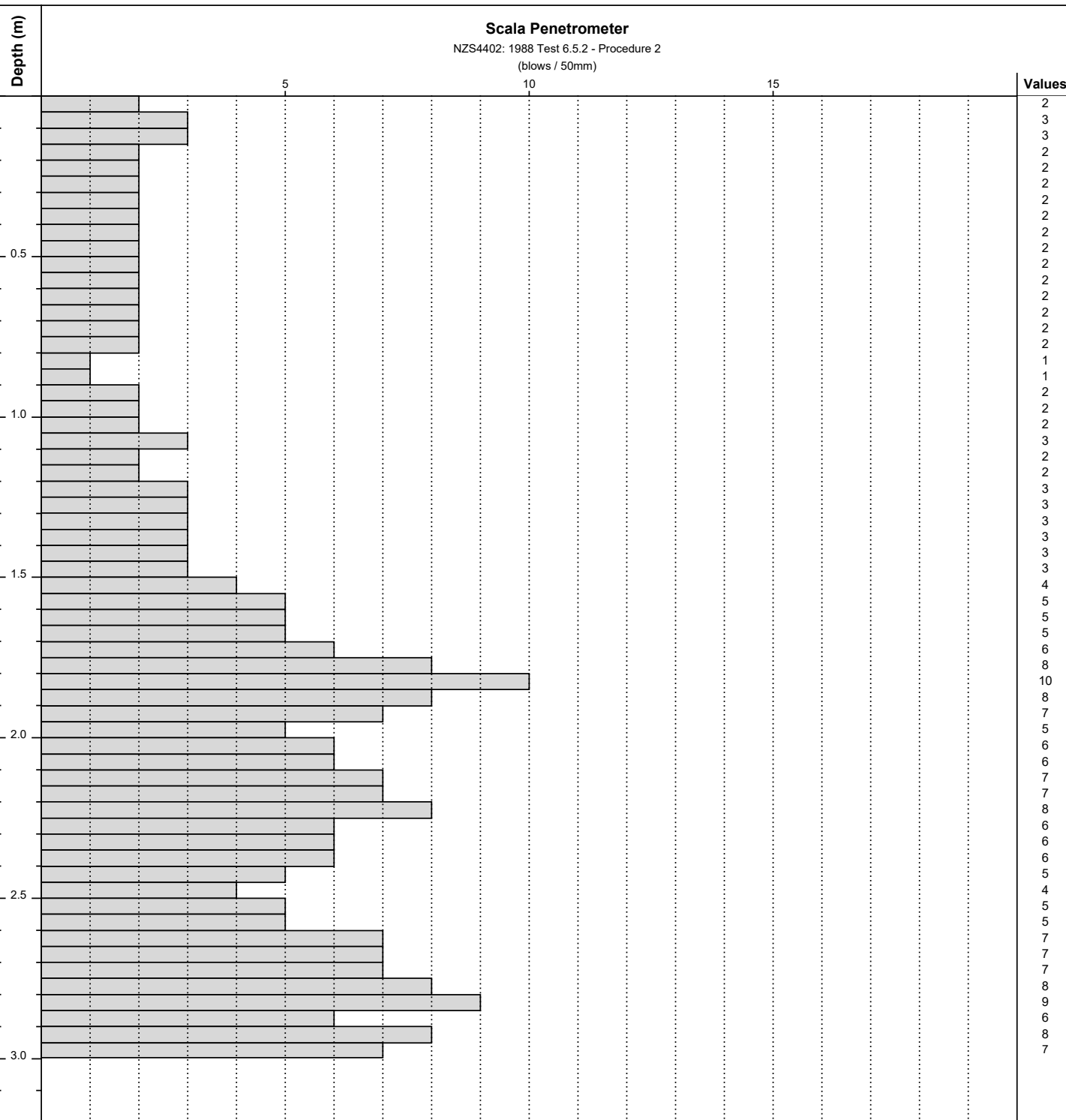
**Test No.:** SP05  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**



<b>Remarks</b>		<b>Investigation Type</b>	
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>		<input checked="" type="checkbox"/> Scala (DCP)	
<b>Contractor:</b>	<b>Equipment:</b>	<b>Recorded By:</b>	<b>Laboratory Technician:</b>
Geocivil	DCP	<b>Recorded Date:</b>	<b>Approved Signatory:</b>



# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

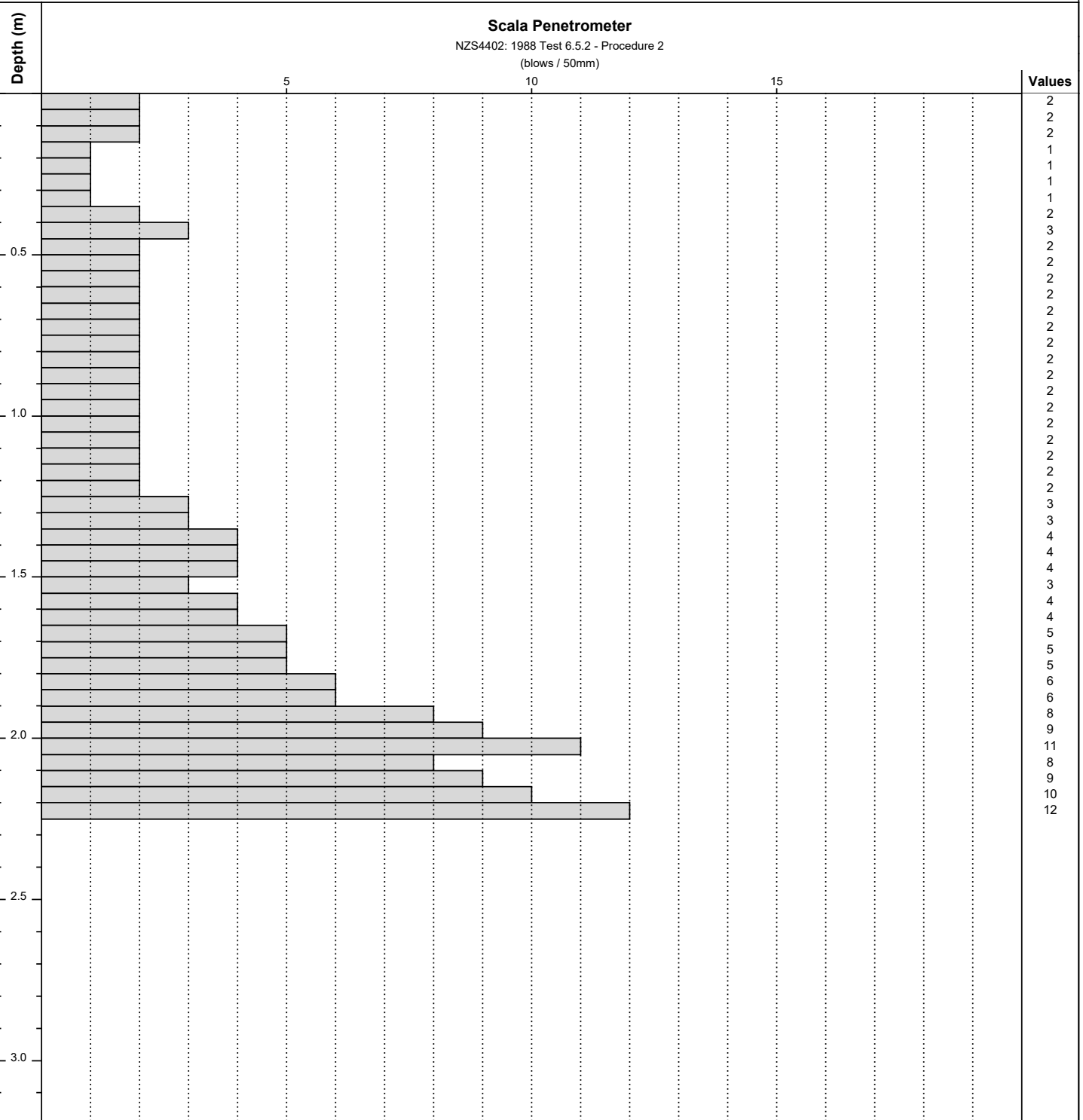
**Test No.:** SP06  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**



Remarks		Investigation Type		
<p>Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test</p> <p>Note: Scala Penetrometer interpretation is not endorsed</p>		<input checked="" type="checkbox"/> Scala (DCP)		
<b>Contractor:</b>  Geocivil	<b>Equipment:</b>  DCP	<b>Recorded By:</b>  <b>Recorded Date:</b>	<b>Laboratory Technician:</b>	<b>Approved Signatory:</b>

# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

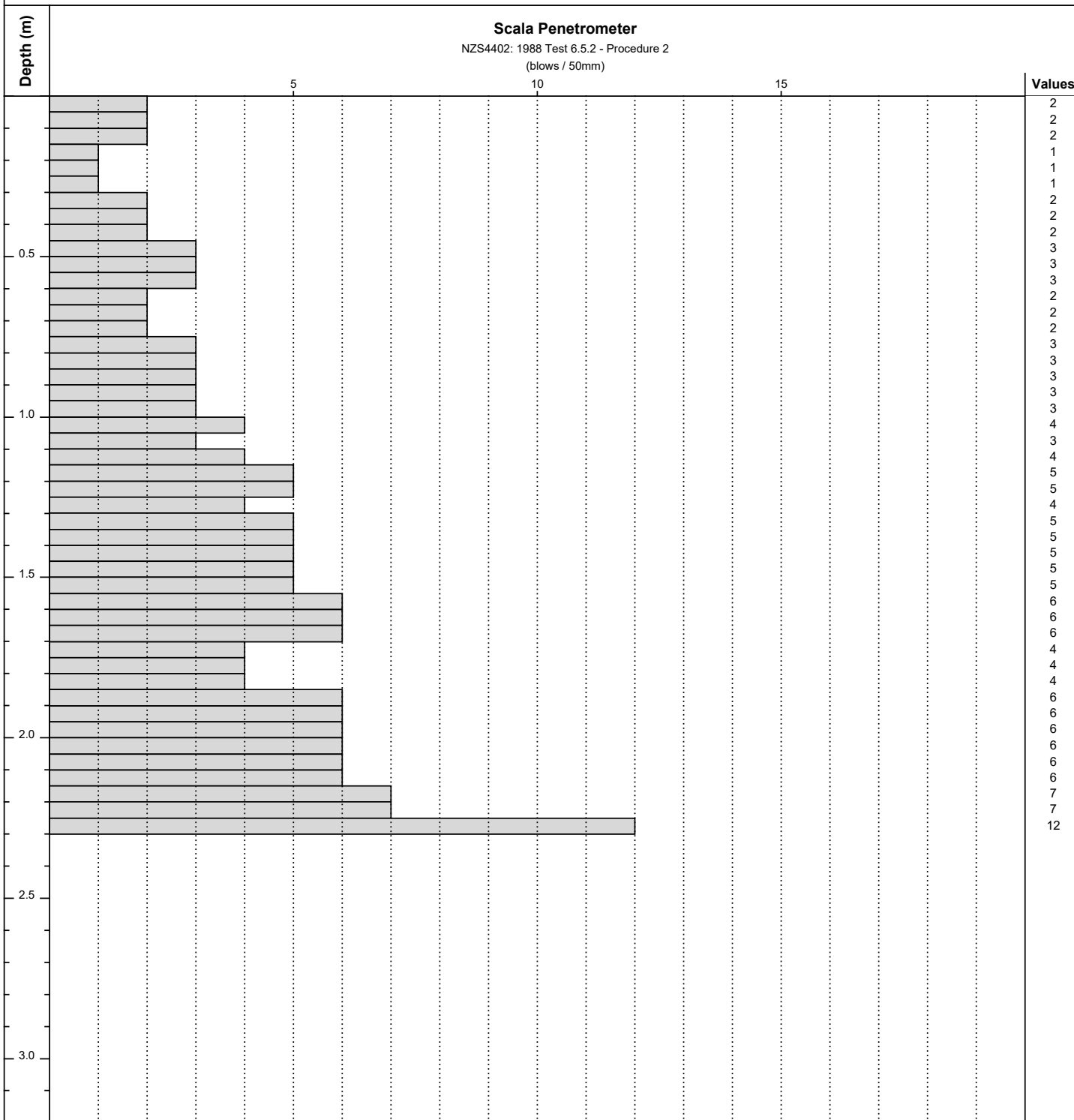
**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

**Test No.:** SP14  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay  
**Ground Level:**





# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

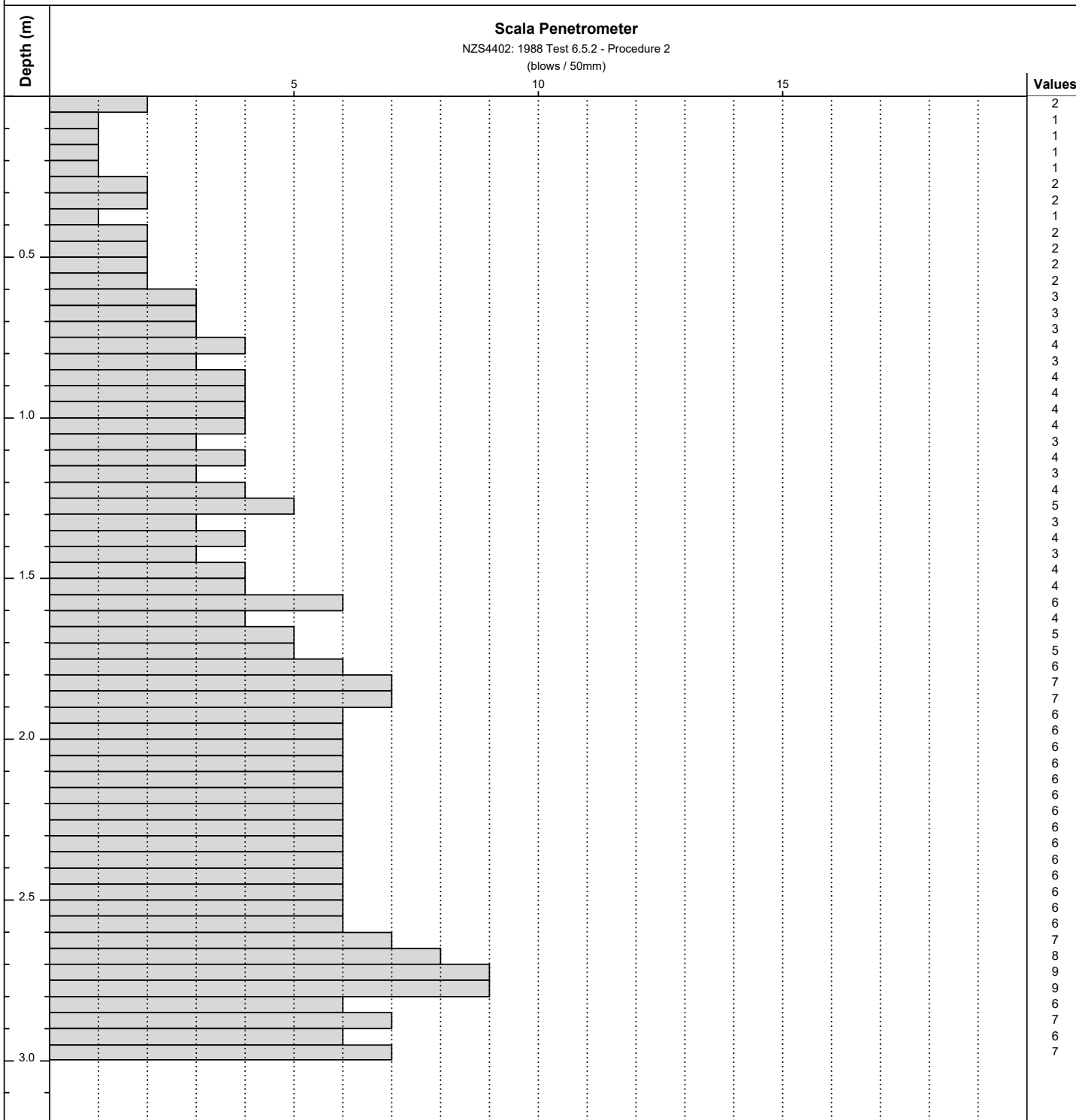
**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

**Test No.:** SP15  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay  
**Ground Level:**



### Remarks

### Investigation Type

☒ Scala (DCP)

Note: All Scala Penetrometer readings taken below 1.5m from start depth are outside the scope of this test  
Note: Scala Penetrometer interpretation is not endorsed

<b>Contractor:</b> Geocivil	<b>Equipment:</b> DCP	<b>Recorded By:</b>	<b>Laboratory Technician:</b>	<b>Approved Signatory:</b>
		<b>Recorded Date:</b>		

# DYNAMIC CONE PENETROMETER TEST

## PRELIMINARY

166 Bank Street,  
Whangarei,  
M:0276565226  
E:info@geocivil.co.nz

**Lab Job No.:** 8020-1992  
**Client:** Cook Costello  
**Job:** Geotechnical Investigation

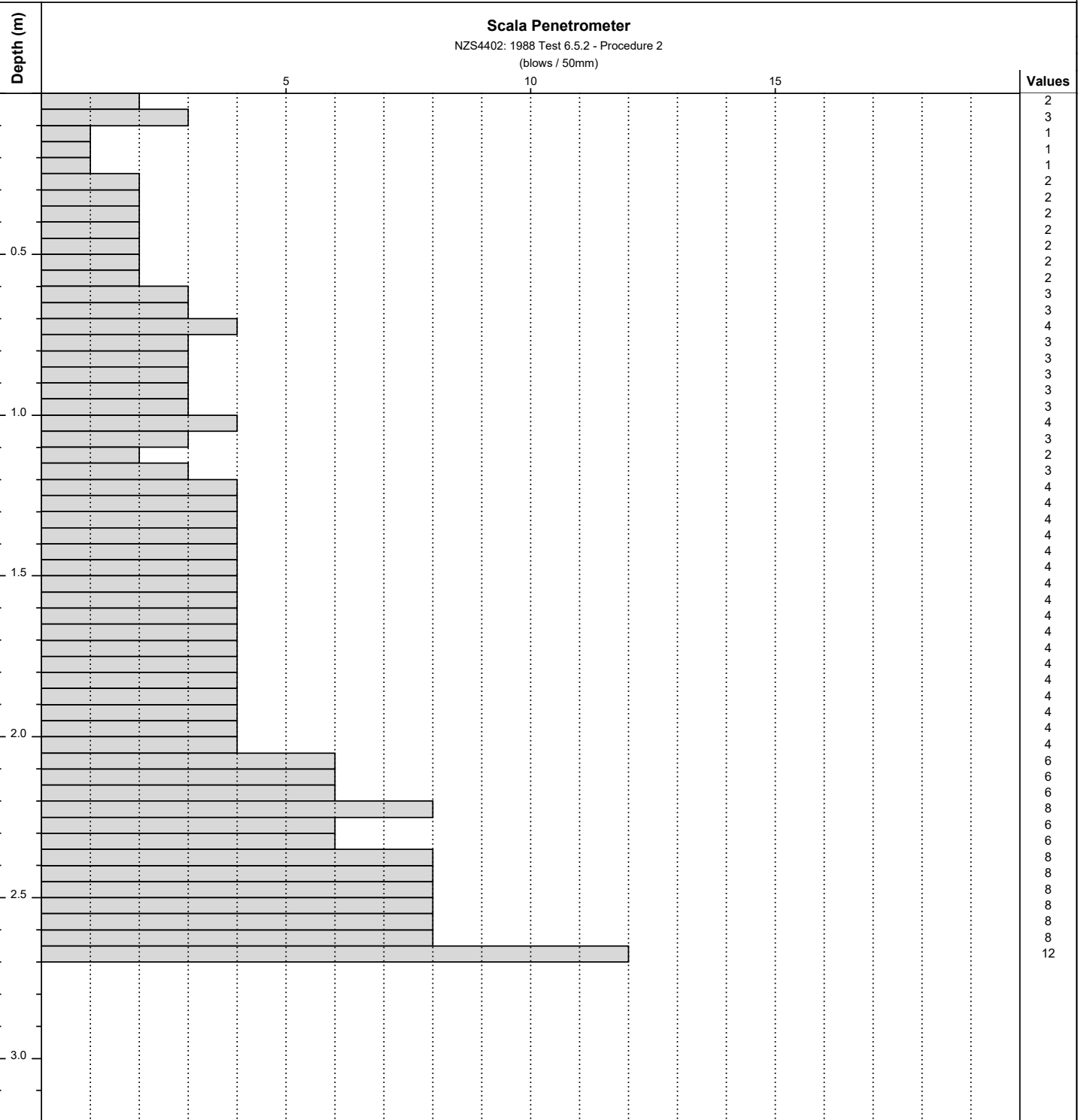
**Test No.:** SP17  
**Hole Depth:** 3.00 m  
**Coordinates:**

**Sheet:** 1 of 1  
**Date:** 25/02/25

**Report No.:** WRE8020-1992-R002  
**Client Ref. No.:** -

**Location:** 1025 Taupo Bay

**Ground Level:**





---

# Archaeological Assessment of Proposed Additions

## Lot 1 DP DP 567902

### Taupo Bay, Far North District

---

20 December 2024

#### Prepared for:

J. Friedlander  
c/o Bay of Islands Planning

#### Prepared by:

Geometria Limited  
PO Box 1972  
Whangarei 0140



# Geometria

## Quality Information

Document: Archaeological Assessment of Proposed Additions Lot 1 DP DP 567902. Taupo Bay, Far North District

Ref: 2024-125

Date: 21 December 2024

Prepared by: Jonathan Carpenter

## Revision History

Revision	Revision Date	Details	Authorized Name
Client draft v0.1	21 December 2024		J. Carpenter

© GEOMETRIA Limited 2024

The information contained in this document produced by GEOMETRIA Limited is solely for the use of the Client identified on the cover sheet for the purpose for which it has been prepared and GEOMETRIA Limited undertakes no duty to nor accepts any responsibility to any third party who may rely upon this document.

All rights reserved. No section or element of this document may be removed from this document, reproduced, electronically stored or transmitted in any form without the written permission of GEOMETRIA Limited.

File ref.:

D:\Documents\2024\2024\_125\_Lot\_1\_DP\_567902\_Taupo\_Bay\Reports\Working\20241220\_Taupo\_Bay\_Archaeological\_Assessment.docx



## Contents

1.0 Introduction .....	5
1.1 The Heritage New Zealand Pouhere Taonga Act 2014 .....	5
1.2 The Resource Management Act 1991. ....	6
2.0 Location .....	6
3.0 Proposed Development .....	6
4.0 Methodology .....	7
4.1 Desktop and Field Assessment .....	7
4.2 Significance Assessment .....	7
5.0 Archaeology and History .....	8
5.1 Archaeological Sites and Context .....	8
5.2 Other Heritage Listings .....	12
5.3 Historic Background.....	13
6.0 Field Assessment .....	22
7.0 Significance Assessment .....	30
8.0 Assessment of Effects .....	30
9.0 Findings and Recommendations.....	30
10.0 Summary.....	30
11.0 References .....	31

## Figures

Figure 1: Proposed development.....	7
Figure 2: Archaeological sites recorded in the vicinity of the subject property (Subject property outlined blue; NZAA ArchSite). ....	9
Figure 3: Map from Hensley (2003) showing terraces, Okiore Pā and areas; Area A was the proposed house site and had no features or sites.....	10
Figure 4: Map of terraces on the northeast spur north of Okiore Pā. ....	11
Figure 5: Plan of P04/640 (Harris and Campbell 2012: 3). ....	12
Figure 6: Whakapaku Deed plan (ANZ R12153654). ....	15
Figure 7: SO 807, the Whakapaku Block (1858). ....	16
Figure 8: Whakapaku transaction (Waitangi Tribunal 1997: 241). ....	18
Figure 9: ML 7921 (1913). ....	18
Figure 10: ML 8395 (1913). ....	20
Figure 11: ML 10410-1 (). ....	21
Figure 12: Proposed development and archaeological sites and features on Lot 1 DP 567902. ....	23
Figure 13: Detail from SN 350 Run 1860/24 (1948) showing the two parts of Okiore Pā (outlined red) and approximate location of project area (green). ....	24
Figure 14: Vicinity of proposed yoga studio.....	25
Figure 15: Looking south towards location of proposed southern suites with existing sleepout, landscaping and court.....	25
Figure 16: Looking east over vicinity of proposed southern suites. ....	26
Figure 17: Vicinity of new garage, and existing sheds.....	26
Figure 18: Looking east down mown track towards defensive ditch, with summit platform beyond. ....	27
Figure 19: Looking south along defensive ditch, from track cutting through the northern end of the feature. ....	27
Figure 20: Looking north along the defensive ditch.....	28
Figure 21: Looking east from track through northern end of defensive ditch, towards the summit platform. ....	28
Figure 22: Looking northeast from platform downslope over L-shaped terrace. ....	29

Figure 23: Looking east along possible terrace modified by windbreak and farm fence. .... 29

## Glossary

Classic	The later period of New Zealand settlement
Midden	The remains of food refuse usually consisting of shells, and bone, but can also contain artefacts
Pa	A site fortified with earthworks and palisade defences
Pit	Rectangular excavated pit used to store crops by Māori
Terrace	A platform cut into the hill slope used for habitation
Wahi tapu	Sites of spiritual significance to Māori



## 1.0 Introduction

J. Friedlander commissioned Geometria Ltd to undertake an archaeological assessment of proposed additions to the existing dwelling and outbuildings at 1025 Taupo Bay Road, Taupo Bay. Two archaeological sites have been recorded in the vicinity although sites are present nearby and the area is archaeologically sensitive, being in coastal Taitokerau.

Under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA, previously the Historic Places Act 1993), all archaeological sites are protected from any modification, damage or destruction except by the authority of Heritage New Zealand Pouhere Taonga.

This report uses archaeological techniques to assess archaeological values and does not seek to locate or identify wahi tapu or other places of cultural or spiritual significance to Māori. Such assessments may only be made by Tangata Whenua, who may be approached independently of this report for advice.

Likewise, such an assessment by Tangata Whenua does not constitute an archaeological assessment and permission to undertake ground disturbing activity on and around archaeological sites and features may only be provided by Heritage New Zealand Pouhere Taonga, and may only be monitored or investigated by a qualified archaeologist approved through the archaeological authority process.

### 1.1 The Heritage New Zealand Pouhere Taonga Act 2014

Under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA; previously the Historic Places Act 1993) all archaeological sites are protected from any modification, damage or destruction except by the authority of the Historic Places Trust. Section 6 of the HNZPTA defines an archaeological site 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)"*

To be protected under the HNZPTA an archaeological site must have physical remains that pre-date 1900 and that can be investigated by scientific archaeological techniques. Sites from 1900 or post-1900 can be declared archaeological under section 43(1) of the Act.

If a development is likely to impact on an archaeological site, an authority to modify or destroy this site can be sought from the local Heritage New Zealand Pouhere Taonga office under section 44 of the Act. Where damage or destruction of archaeological sites is to occur Heritage New Zealand usually requires mitigation. Penalties for modifying a site without an authority include fines of up to \$300,000 for destruction of a site.

Most archaeological evidence consists of sub-surface remains and is often not visible on the ground. Indications of an archaeological site are often very subtle and hard to distinguish on the ground surface. Sub-surface excavations on a suspected archaeological site can only take place with an authority issued under Section 56 of the HNZPTA issued by the Heritage New Zealand.

## **1.2 The Resource Management Act 1991.**

Archaeological sites and other historic heritage may also be considered under the Resource Management Act 1991 (RMA). The RMA establishes (under Part 2) in the Act's purpose (Section 5) the matters of national importance (Section 6), and other matters (Section 7) and all decisions by a Council are subject to these provisions. Sections 6e and 6f identify historic heritage (which includes archaeological sites) and Māori heritage as matters of national importance.

Councils have a responsibility to recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga (Section 6e). Councils also have the statutory responsibility to recognise and provide for the protection of historic heritage from inappropriate subdivision, use and development within the context of sustainable management (Section 6f). Responsibilities for managing adverse effects on heritage arise as part of policy and plan preparation and the resource consent processes.

## **2.0 Location**

The subject property is Lot 1 DP 567902 and is 8.4275 ha in size. It is located between Taupo Bay Road and Taupo Bay coastline, northwest of the Whangaroa Harbour mouth, on the ridge above the northern end of Taupo Bay (Figure 1). The property covers a section of ridgeline, running from the coast on the north end of bay and rising steeply to the ridge top, with a maximum height of approximately 60m above sea level at the northern end of the property, before rolling down to Taupo Bay Road on the western boundary at 10m above sea level.

The property is in a mix of pasture, landscaped gardens, and regenerating native coastal forest with several windbreaks of large exotic trees. The main dwelling is located on the eastern side of the property above the coastal cliff, with several outbuildings and landscaped gardens.

The Taupo Bay area consists of gently undulating country with eroded soft, sedimentary shale's and sandstones. Small valley systems with incised streams are characteristic of the area north of Whangaroa Harbour, which is a drowned river system. Much of the area is farmland with pockets of regenerating native bush and areas of plantation forestry.

## **3.0 Proposed Development**

J. Friedlander proposes changes to the existing dwelling on the property with the addition of adjoining suits and outbuildings. Only a concept plan has been prepared, to-date (Figure 2) but these show changes to the northern elevation of the house and a yoga studio linked via a glazed passageway, the addition of two suites to the south of the main dwelling lined by hallways, and a new garage with ablutions and lunchroom.





Figure 1: Proposed development.

## 4.0 Methodology

### 4.1 Desktop and Field Assessment

The methods used to assess the presence and state of archaeological remains in the project area included both a desktop review and field survey. The desktop survey involved an investigation of written records relating to the history of the property. These included regional archaeological publications and unpublished reports, New Zealand Archaeological Association Site Record Files (NZAA SRF - ArchSite - [www.archsite.org.nz](http://www.archsite.org.nz) - is the online repository of the NZAA SRF), land plans held at Land Information New Zealand, and maps and plans held by other public institutions and repositories.

The field assessment involved walking over the project area with a concentration on exposed ground surfaces, eroding areas and cuts. Systematic probing was undertaken over the lawns in areas where new structures are proposed. No spade test pitting was undertaken.

### 4.2 Significance Assessment

Where archaeological sites, features and/or values are present in the vicinity of the proposed track improvements, two sets of criteria are used to assess their significance:

The first set of criteria assess the potential of the site to provide a better understanding of New Zealand's past using scientific archaeological methods. These categories are focussed on the intra-site level.

*How complete is the site? Are parts of it already damaged or destroyed?*  
A complete, undisturbed site has a high value in this section, a partly destroyed or damaged site has moderate value and a site of which all parts are damaged is of low value.

*How diverse are the features to be expected during an archaeological excavation on the site?* A site with only one or two known or expected feature types is of low value. A site with some variety in the known or expected features is of moderate value and a site like a defended kainga which can be expected to contain a complete feature set for a given historic/prehistoric period is of high value in this category.

*How rare is the site?* Rarity can be described in a local, regional and national context. If the site is not rare at all, it has no significance in this category. If the site is rare in a local context only it is of low significance, if the site is rare in a regional context, it has moderate significance and it is of high significance if the site is rare nationwide.

The second set of criteria puts the site into its broader context: inter-site, archaeological landscape and historic/oral traditions.

*What is the context of the site within the surrounding archaeological sites?* The question here is the part the site plays within the surrounding known archaeological sites. A site which sits amongst similar surrounding sites without any specific features is of low value. A site which occupies a central position within the surrounding sites is of high value.

*What is the context of the site within the landscape?* This question is linked to the one above, but focuses onto the position of the site in the landscape. If it is a dominant site with many features still visible it has high value, but if the position in the landscape is ephemeral with little or no features visible it has a low value. This question is also concerned with the amenity value of a site and its potential for on-site education.

*What is the context of the site within known historic events or people?* This is the question of known cultural association either by tangata whenua or other descendant groups. The closer the site is linked with important historic events or people the higher the significance of the site. This question is also concerned with possible commemorative values of the site.

An overall significance value derives from weighing up the different significance values of each of the six categories. In most cases the significance values across the different categories are similar.

## **5.0 Archaeology and History**

### **5.1 Archaeological Sites and Context**

There are a number of sites in the vicinity of the subject property, with P04/49 located on the northeastern side of the property (Figure 2).

P04/49 Okiore Pā was recorded by R. Lawn in 1972. Lawn was a manager of the NZ Forest Service in Kaikohe and an avocational archaeologist, and his work in Northland lead him to record a large number of sites in the late 1960s and 1970s. His site record lacks any detail merely noting 'levels' (terraces) on a low headland with rising land behind. The name "Okiore" has been added to the record later, presumably from the topographical map of the area which shows the name. He may have recorded the site from the beach below.

The subject property was visited by avocational archaeologist V. Hensley who undertook an assessment of a proposal to build a new dwelling on the property, in 2003. Hensley tried to reach Okiore Pā but was thwarted by dense regenerating scrub and high kikuyu. He did record terraces running down the northeastern spur to the north of the pā (Figure 3-Figure 4).





Figure 2: Archaeological sites recorded in the vicinity of the subject property (Subject property outlined blue; NZAA ArchSite).



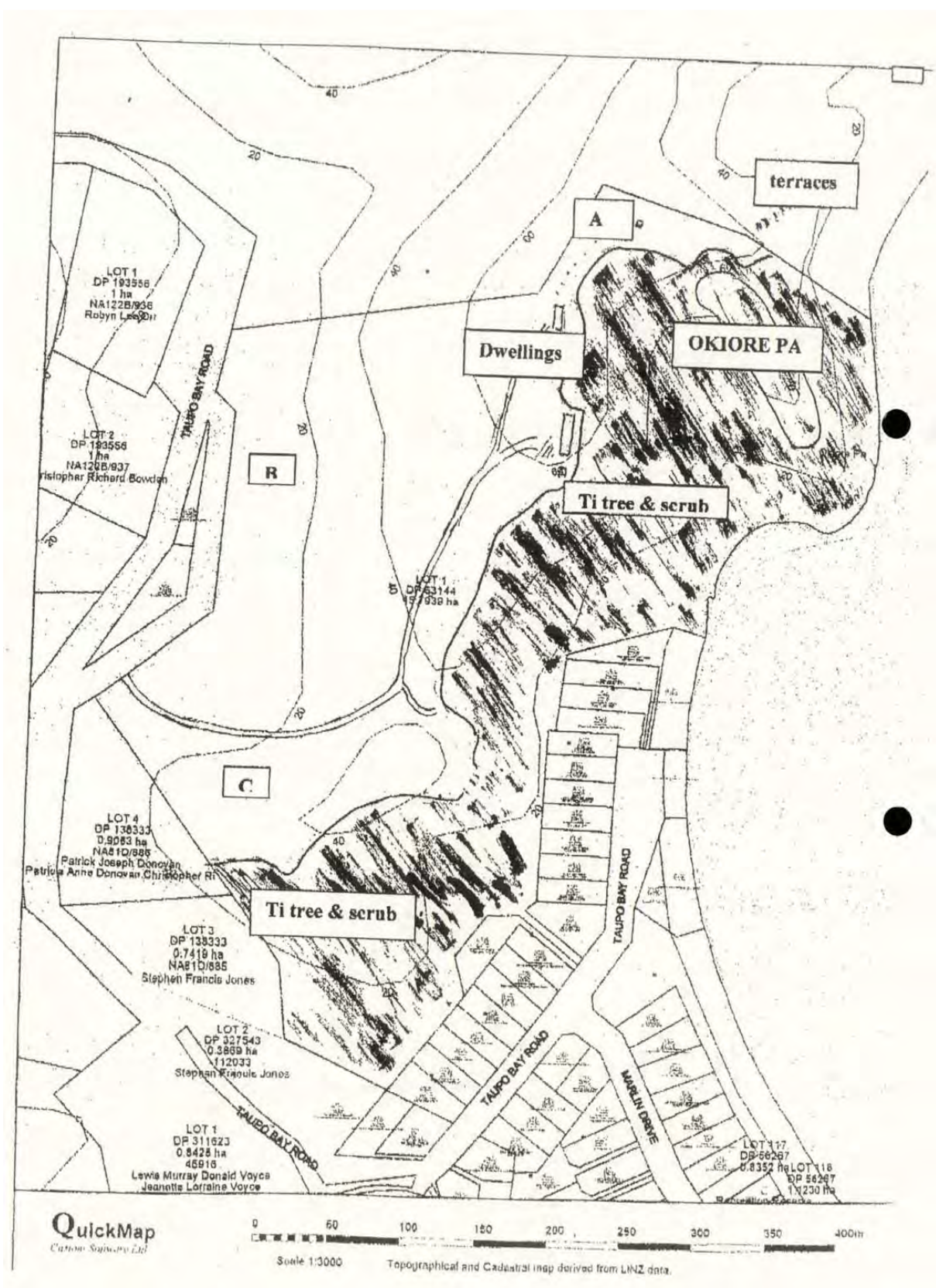


Figure 3: Map from Hensley (2003) showing terraces, Okiore Pā and areas; Area A was the proposed house site and had no features or sites.



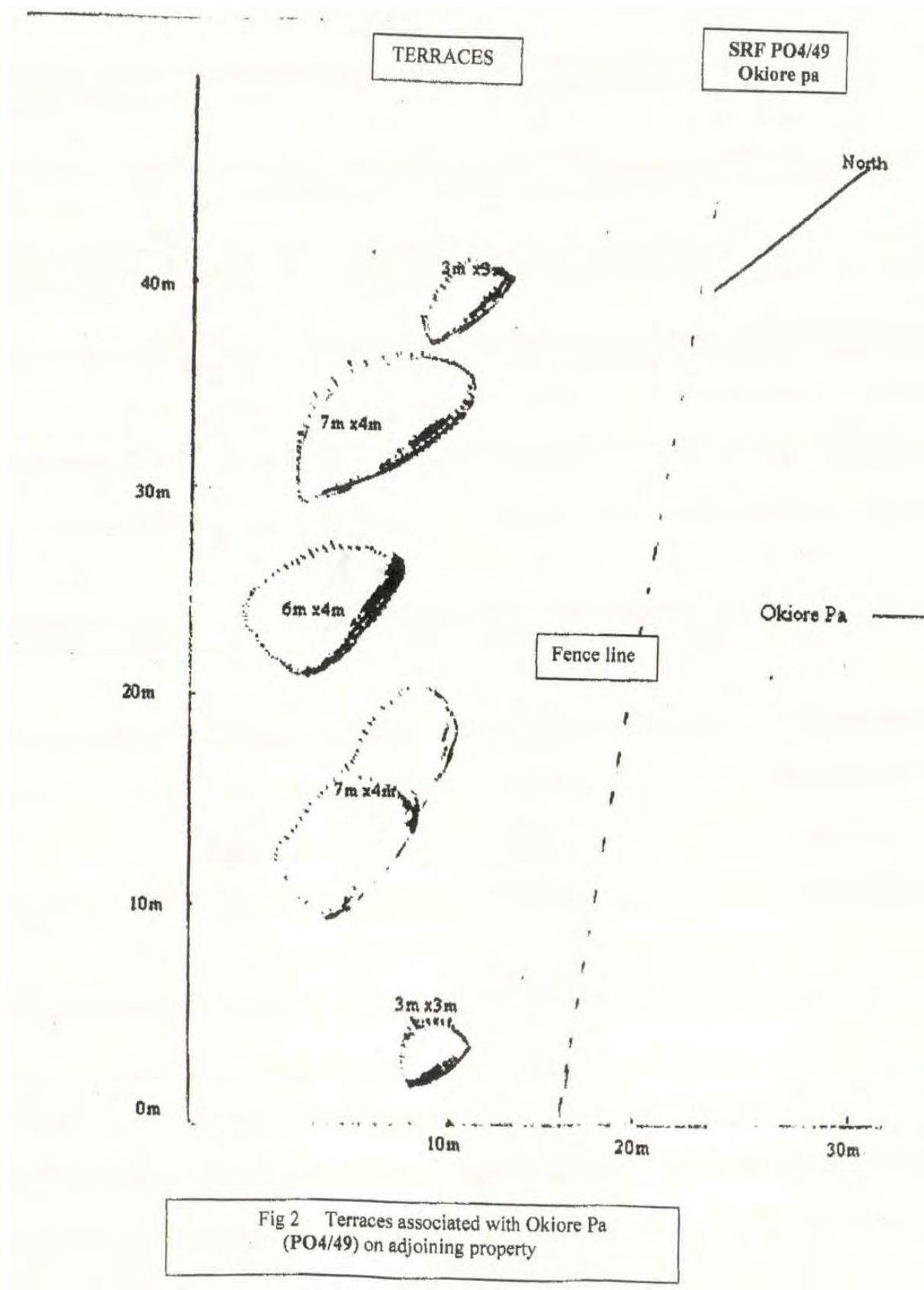


Figure 4: Map of terraces on the northeast spur north of Okiore Pā.

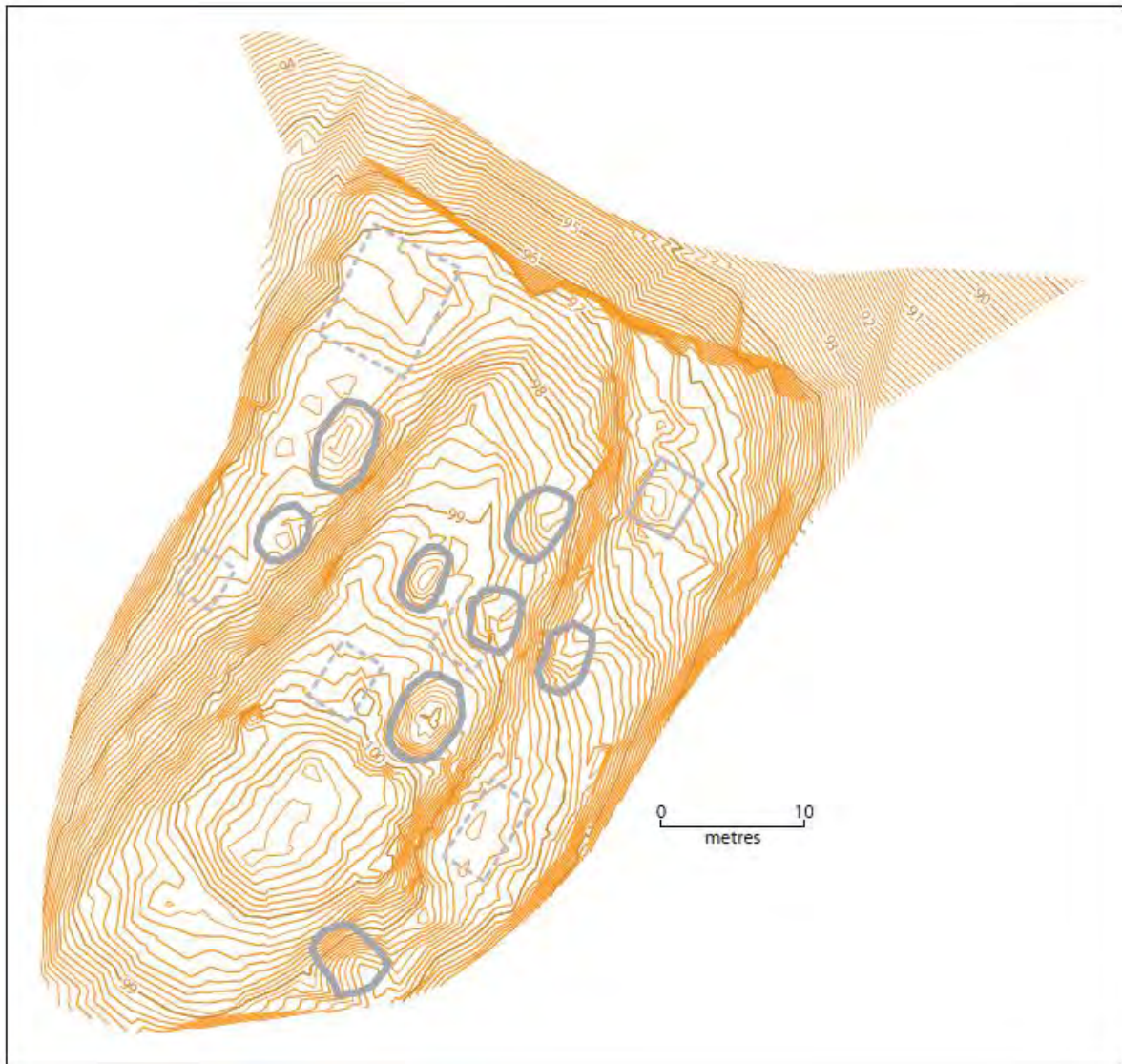


Figure 5: Plan of P04/640 (Harris and Campbell 2012: 3).

The next nearest site is P04/640, a pit and terrace complex located 350m to the northwest of the proposed development on the neighbouring property (Figure 5). It was recorded by M. Campbell in 2003 during a pre-pine harvest assessment and re-recorded after site damage nearby in 2012 (Harris and Campbell 2012). Campbell suggested that based on site location and topography it was a pā defended by topography and palisades and without earthwork defences.

Five hundred metres to the south, P04/43 was recorded at the base of the main ridge on the north side of Taupo Bay, near Taupo Bay Road. It comprised a patch of taro in the stream and on the banks, being actively browsed by cattle. The site was recorded by M. Nicholls, A. Leahy and J. Davidson. At the time, the trio were students at the University of Auckland and they had been advised of the presence of an extensive area drains possibly related to prehistoric Māori horticulture nearby on Tupou Station by C. Devonshire.

They visited the area in January 1965. They focussed on recording features at Tupou but appear to have visited Taupo Bay and chanced on the taro. Along with the site records resulting from the survey, a short report was published in the Newsletter of the New Zealand Archaeology Association (Nichol 1965).



Beyond the immediate area, there are a large number of sites recorded to the north on Tupou Station, to the southeast around Lane Cove, and on coastal areas to the northwest and inland Stoney Creek Station. The majority of the sites recorded in the Taupo Bay area were recorded in the late 1960s and early 1970s and it appears a lack of access to private land greatly hindered the recording process with many of the sites recorded from the roadside, aerial photographs and neighbouring properties.

## 5.2 Other Heritage Listings

There are no scheduled historic places or Sites of Significance to Māori on the subject property, or Listed Historic Places or Wāhi Tapu on the Heritage New Zealand List.

## 5.3 Historic Background

The Tangata Whenua of this area are Ngati Kahu who trace their descent from the waka Mamaru, which made landfall at Taipa. Over time the early explorers expanded and became Ngatikahu Ki Whangaroa and their descendants settled extensively throughout the area.

The Whakapaku Block was purchased by the Crown on the 22nd December 1856 for £200.00, and although Taupo Bay was included in this block area, a section of land around Taupo Bay and an area of Motukahakaha were reserved from the sale. At this time, Crown officials estimated that the boundaries of the block contained 2,688 acres and the reserved blocks, Taupo and Motukahakaha, 400 and 180 acres respectively.

On survey, in 1857, it was found that the Whakapaku block actually contained 12,050 acres. The Taupo block contained 2,510 acres and was bounded to the south by the Whangaroa Harbour while the Motukahakaha block to the north contained 480 acres. The Karangi trig was one of the boundary markers between the reserved Taupo Block and the rest of the Whakapaku Block. The deed (reproduced in Turton 1877) describes the boundaries of the sale as:

"The Boundaries which are these commence on the south eastern side at a stream Boundaries called "Wairakau" near the heads of the "Whangaroa" harbour from the stream of "Wairakau" it ascends the high ground at a point known as "Te Umukiwi" from thence it follows the ridge near some land-slips until it reaches "Pukeahuahu" and from thence until it reaches the stream of water known as "Te Rere" on the sea side. (The settlement of "Taupo" is excepted or left out of this purchase)—from the stream "Te Rere," it follows the seacoast, to "Matanehunehu" "Umakukupa," "Tupou," "Ohairiao," ("Motukahakaha," this last named settlement is left out or excepted from the purchase, the boundary of which is on the top of the ridge) from thence to "Tauarua," "Kowhitiwahine," it takes an ascent in an inland direction to the mountain known as "Te Kapara," from thence to the "Atuanui" stream, which is crossed, and proceeds until it joins, or approaches, the land sold to James Berghan,—from thence, in a south easterly direction towards "Parahuhua," "Otuhi," the hill called "Waikukupa," until it descends to the stream of "Te Tahua" and from thence to the harbour of "Whangaroa" where it unites or joins the boundary from which it first commenced:

The Settlements of "Taupo" and "Motukahakaha" are excepted from this purchase; Two places excluded: Taupo and Motukahakaha."Taupo" 400 acres, "Motukahakaha" 180 acres."

The deed describes the two settlements at Taupo and Motukahakaha indicating that these areas were still occupied at that time. Unfortunately the original Deeds Indexes for Mangonui County were lost prior to being transferred to Archives New Zealand and the reconstructed copy contains only application numbers and folio references, rather than the dated lists of transactions, instruments and sketches

organised by block name which would have been contained in the original Index. This makes it difficult to reconstruct the history of land ownership and alienation.

A later plan SO 7056 (1894) shows the Taupo Block still as Native Land at that time, with the European land to the north owned by F. L. Farndom at that time.

ML 7921 (1911) shows the small Māori settlement in the bay, which comprised a dozen whare, mostly on the south and west/inland side of the Taupo/Owhero Stream or tucked up against the hillside on the north side of the stream, and extensive fenced areas. These are all annotated with the names of the occupants.

While the sandy country between the stream and beach has no buildings, the area is fenced. Along with the whare, the marae, church and burial ground are shown, along with a woolshed and a kumara cultivation. The track to Totara North and Kaeo is also marked. There are two fenced areas on the ridgeline north of the flats and stream, belonging to Hukatai Taka. These would appear to be located on the lot immediately south of the subject property.

ML 8395 (1912) shows many of the same structures and enclosed areas, albeit unlabelled and appears to be derived from the earlier plan.

ML 10410 (1916) shows the partition of the Taupo Native Reserve, with the subject property being part of the eastern end of the 107 acre Lot 3, with Lot 2B to the north and Lot 4 to the south.



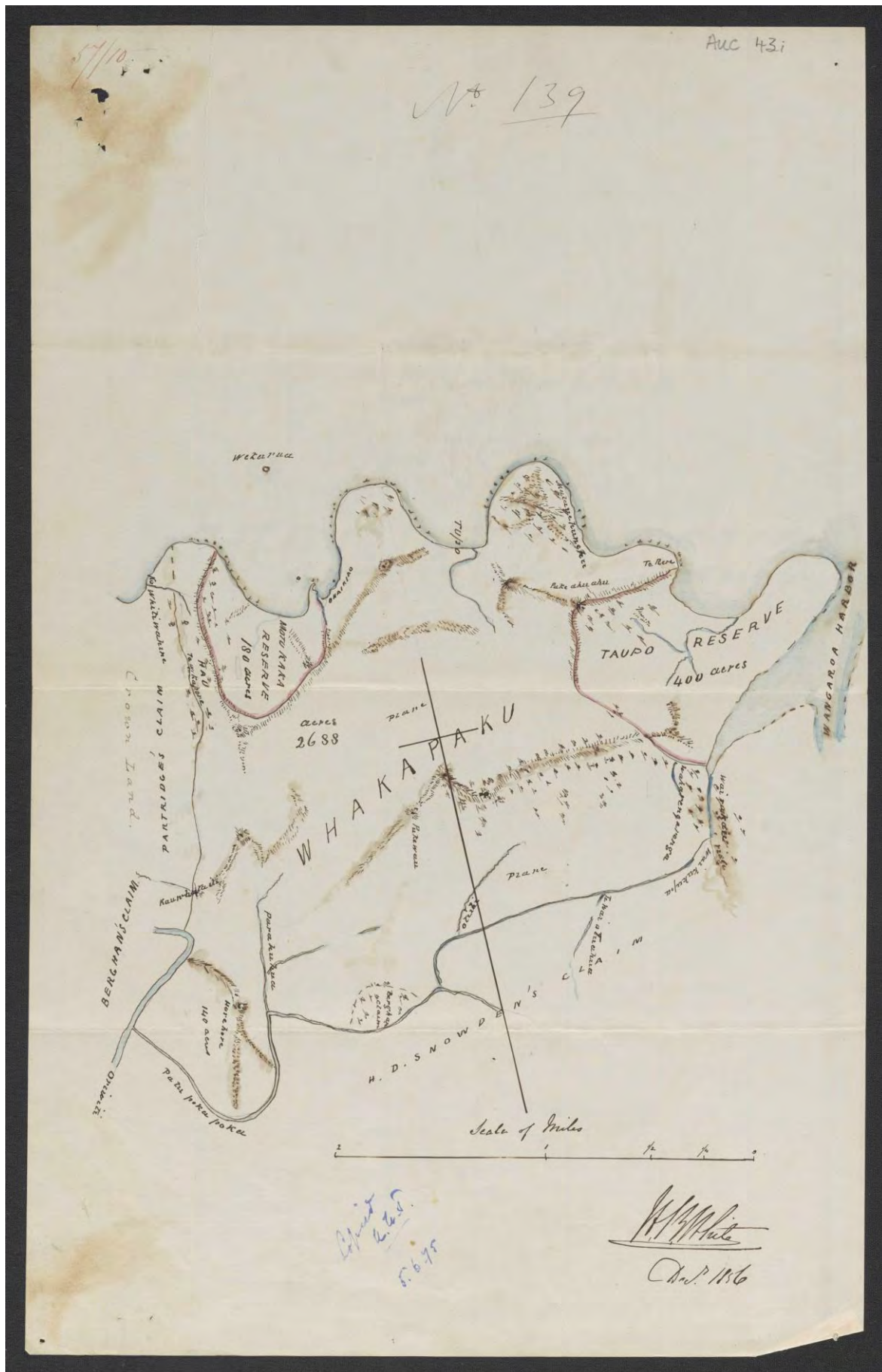


Figure 6: Whakapaku Deed plan (ANZ R12153654).



Figure 7: SO 807, the Whakapaku Block (1858).



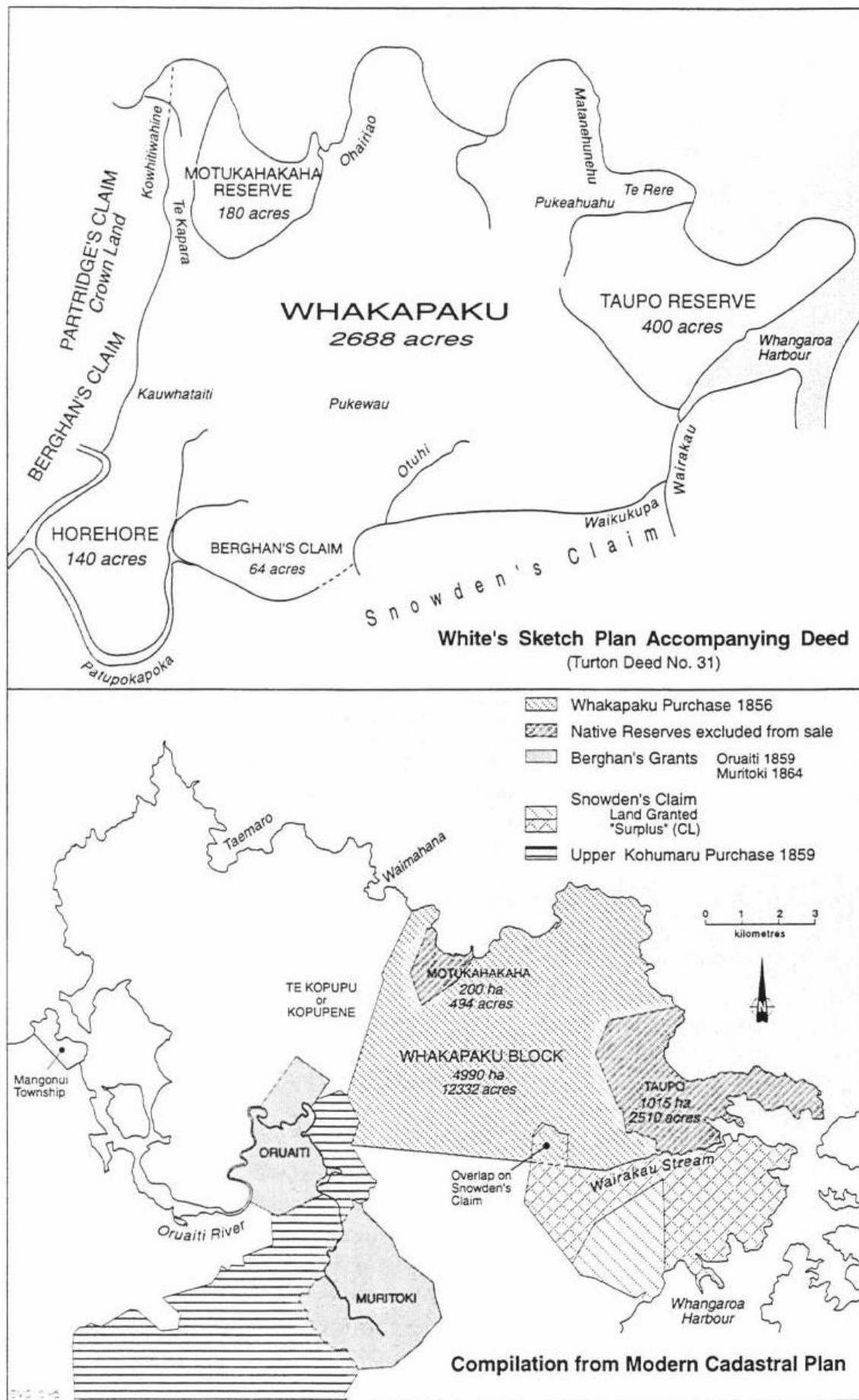


Figure 46: Whakapaku transaction

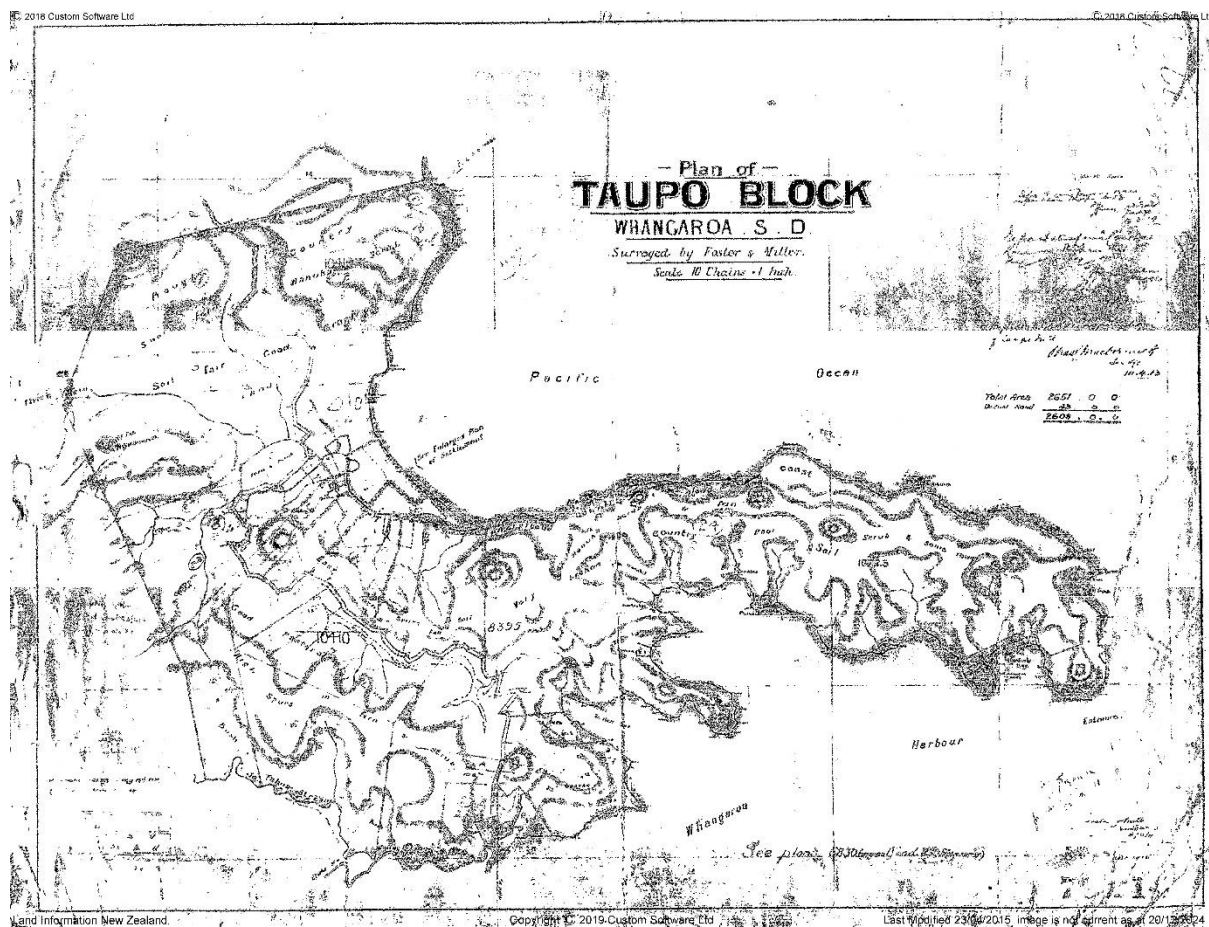
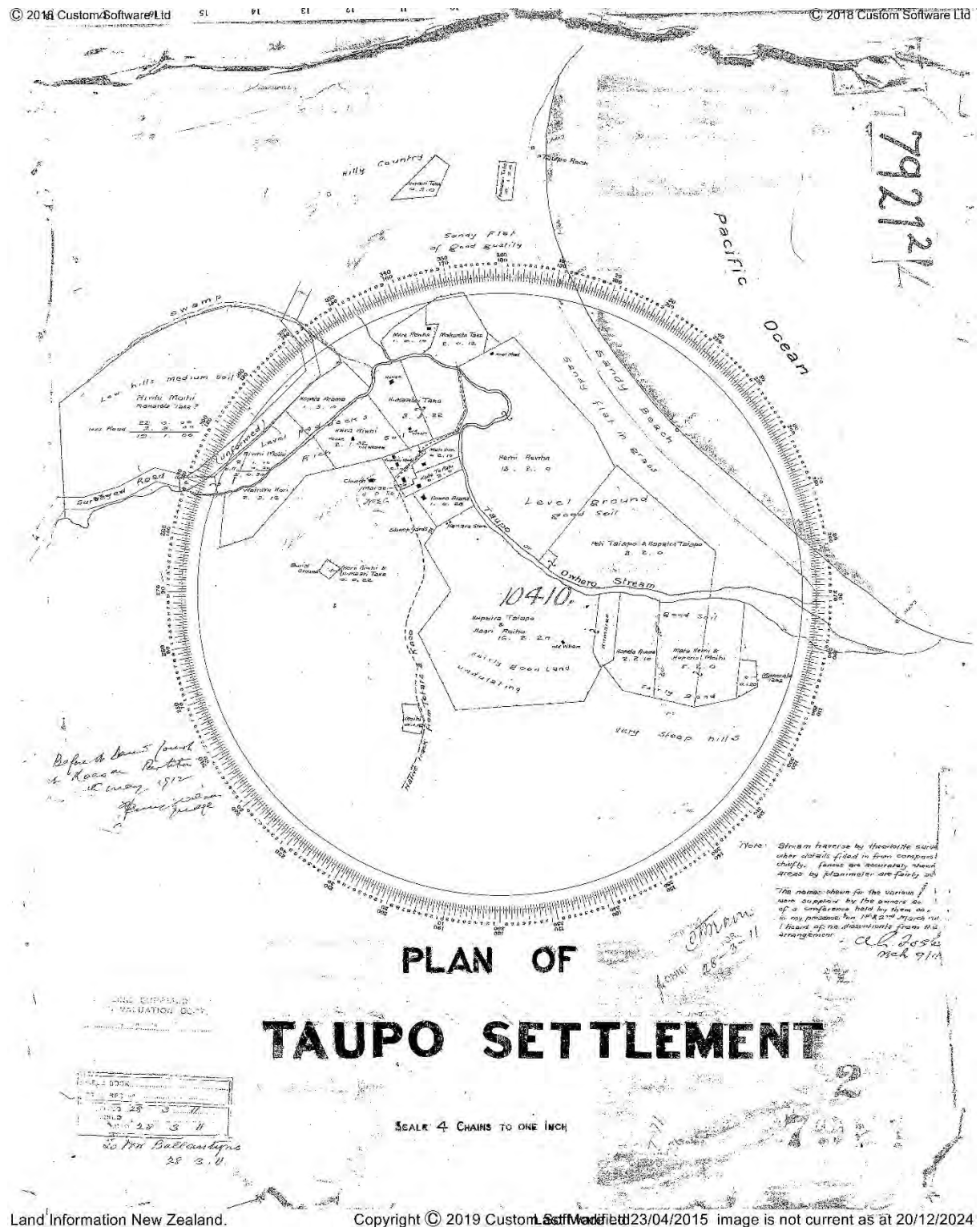


Figure 9: ML 7921 (1913).



© 2018 Custom Software Ltd



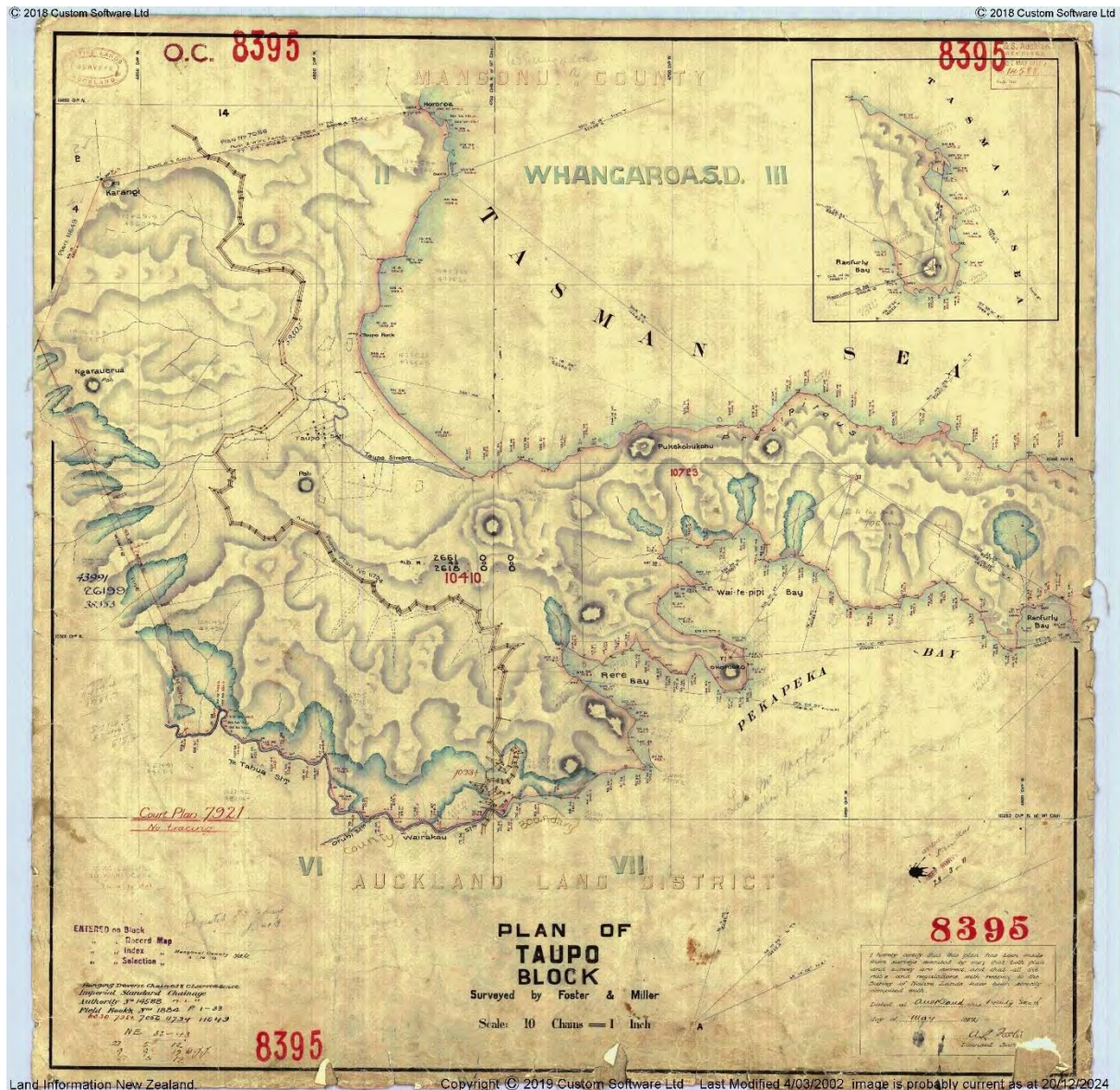


Figure 10: ML 8395 (1913).





## 6.0 Field Assessment

The subject property was visited for two hours by J. Carpenter on 18 December 2024. The weather was sunny and hot. The conditions for survey were good, with the dry weather meaning extensive bare areas around the edges of lawns, paved and landscaped areas and building platforms. There is a relatively thin topsoil formation across the area, over weathered orange clay and likelihood of major subsurface archaeological features is small.

Significant earthworks have occurred when the dwelling was originally developed and in subsequent years including multiple cut and fill platforms for the house and outbuildings, level areas of lawn and patios, and driveways. Between 2021 and 2021 the very large trees along both sides of the driveway have been removed and the area replanted.

No archaeological sites or features were observed on the extant ground surface in the vicinity of the proposed additions. Probing at 1.5m intervals along 1.5m transects across areas in lawn did not suggest the presence of any subsurface archaeological features.

Two small areas with a very small scatter of highly fragmented shell were noted (less than a dozen fragments smaller than a fingernail at each location), one upslope/north of the existing garage which appears to relate to the important of sandy soil to fill a stump hole or similar activity. Another small scatter was noted at the top of the driveway where it meets the turning circle, on the western/downslope side on the shoulder between the driveway and fence; this appears to be from landscaping or driveway material rather than archaeological.

The northern part of Okioire Pā was visited in order to determine the distance of any features from the proposed works. It will not be affected, with the nearest features being 110m northeast of the proposed new garage and yoga studio. The southern part of the pā was not visited but the general arrangement of features was visible in the 1948 aerial (Figure 12-Figure 13).

The pā was found to comprise a central rectangular summit platform with a defensive ditch on the western side, cutting off the pā from the ridgeline which rises to the west to meet the main north-south ridge. The defensive ditch is 2m wide at the base and 5m wide at the top of the banks, and 1.5m deep. The extant part of the ditch is 10m long with 3m on the northern end modified by the farm truck which cuts across the earthwork allowing tractor/mower access to the platform.

The summit platform is 20 x 11 m in size and is in a mix of mown and rank kikuyu. There is an L-shaped terrace running below the northeastern corner of platform, separated from it by a 1.5m high, moderately sloping scarp, also under kikuyu. The terrace is up to 5 m wide and 20 m from end to end. Below this terrace is another possible terrace separated by a 2m high moderately sloping scarp; this feature is under regenerating forest and weeds and is cut by a farm fence running west across the slope towards the main ridge, and northeast down the spur towards the coast. This possible terrace is 6 x 5m wide.

There is another possible 5 x 5m triangular terrace below the southeast corner of the platform, with a 4m wide gently sloping spur extending in that direction for 20m before dropping steeply down to the main part of the pā. This area is also under dense regenerating forest and weeds. A fire-cracked oven stone was sitting on the surface of the terrace. Four metres below the northern side of the platform is a possible terrace running west-east and joining the small northeastern terrace. It is under windbreak trees and a fenceline and appears to have been modified by blading the fenceline. Hensley recorded additional terraces below this point on the west side of the fence.

In general P04/49 Okioire Pā is in fair condition and appears to be stable. It will not be affected by the proposal.



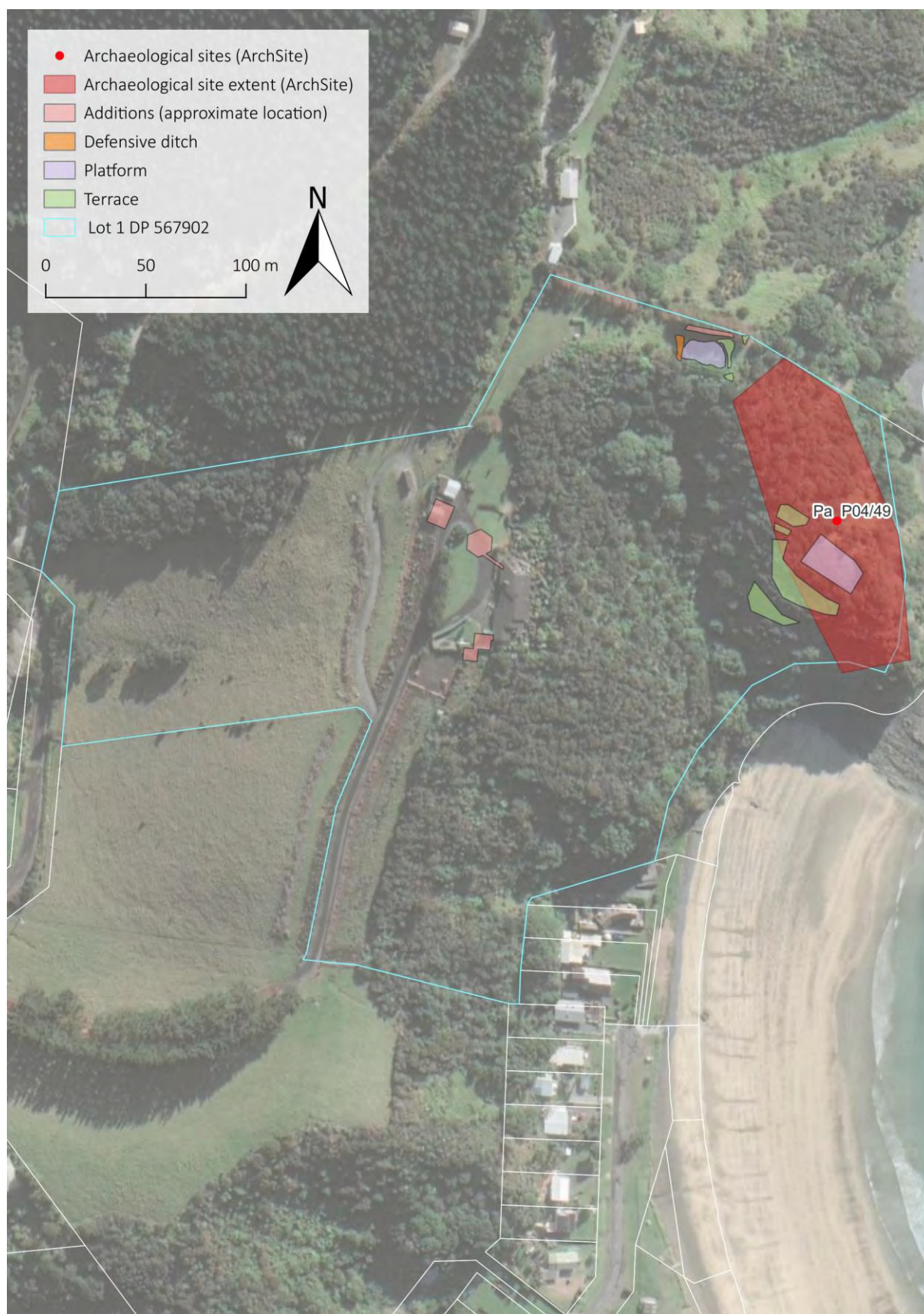


Figure 12: Proposed development and archaeological sites and features on Lot 1 DP 567902.



Figure 13: Detail from SN 350 Run 1860/24 (1948) showing the two parts of Okiore Pā (outlined red) and approximate location of project area (green).





Figure 14: Vicinity of proposed yoga studio.



Figure 15: Looking south towards location of proposed southern suites with existing sleepout, landscaping and court.





Figure 16: Looking east over vicinity of proposed southern suites.



Figure 17: Vicinity of new garage, and existing sheds.





Figure 18: Looking east down mown track towards defensive ditch, with summit platform beyond.



Figure 19: Looking south along defensive ditch, from track cutting through the northern end of the feature.





Figure 20: Looking north along the defensive ditch.



Figure 21: Looking east from track through northern end of defensive ditch, towards the summit platform.





Figure 22: Looking northeast from platform downslope over L-shaped terrace.



Figure 23: Looking east along possible terrace modified by windbreak and farm fence.



## **7.0 Significance Assessment**

There are no archaeological sites, or other heritage sites or features to assess.

## **8.0 Assessment of Effects**

It is unlikely that there will be archaeological effects from the proposed works.

An archaeological Authority under the Heritage New Zealand Pouhere Taonga Act 2014 is not required but a standard accidental discovery protocol should be in place during earthworks.

## **9.0 Findings and Recommendations**

- 1) There are unlikely to be any archaeological or other historic heritage effects from the proposed additions, yoga studio and garage, and associated landscaping.
- 2) An archaeological Authority is not required but an archaeological accidental discovery protocol should be in place.
- 3) If archaeological features or possible archaeological features, such as shells, charcoal, fire-cracked rock, charcoal or ash-stained soil, unusual cuts and fills, bones, or historic artefacts are encountered on the subject property in the course of improving the farm road or placing the dwellings and services, J. Friedlander or his agents should cease work in the immediate vicinity and the Heritage New Zealand Pouhere Taonga and Geometria Ltd should be contacted for advice on how to proceed.

## **10.0 Summary**

Geometria Ltd was commissioned by J. Friedlander to undertake an archaeological assessment of the proposed redevelopment of the existing dwelling and outbuildings on Lot 1 DP 567902, 1025 Taupo Bay Road, Taupo Bay.

Archaeological sites or features are unlikely to be affected by the additions and an archaeological Authority is not required. However a standard accidental archaeological discovery protocol should be in place throughout the project.

Okioire Pā is located on the northeast side of the property and is in fair and stable condition. Continued care should be taken to avoid any accidental damage to this significant site in the future, particularly the more accessible northern part.



## 11.0 References

- Campbell, M., 2003. Archaeological Assessment of Pine Plantation Harvest, Hatton Property, Taupo Bay. Unpublished report for C. Hatton. CFH Heritage Ltd, Auckland.
- Coster, J., and G. Johnston, 1976. Stoney Creek Archaeological Survey. Unpublished Report for Historic Places Trust, Wellington.
- Furey, L., 2006. Māori Gardening: An Archaeological Perspective. Department of Conservation, Wellington.
- Groube, L. 1966. Rescue excavations in the Bay of Islands. New Zealand Archaeological Association Newsletter 9: 108–114.
- Harris, J., and M. Campbell, 2012. Archaeological Damage Mitigation, Sites P04/640 AND P04/641, Hatton Property, Taupo Bay. Unpublished report for Historic Places Trust and C. Hatton. CFH Heritage Ltd, Auckland.
- Hayward, B., 2017. Out of the Ocean, Into the Fire. Geoscience Society of New Zealand Miscellaneous Publication 146, Lower Hutt.
- Hensley, V., 2003. Archaeological Report. Lot 1 DP 63144. Unpublished report for K. Male, prepared by V. Hensley, Kaitia.
- Jones, K. L., 1994. Nga Tohuwhenua Mai Te Rangi. A New Zealand Archaeology in Aerial Photographs. Victoria University Press, Wellington.
- Kahukuraariki Trust Board, 2007. Agreement in Principle for the Settlement of Historical Claims of Ngatikahu ki Whangaroa.
- Mathews, O., 1985. Nga Taro o Aotearoa. Journal of the Polynesian Society, Vol. 94 No.3: 253-272.
- Nichols, M., 1965. Some Probable Pre-European Agricultural Evidence in Northland. New Zealand Archaeology Association Newsletter. Vol. 8 No. 4: 148-149.
- Turton, H. H. 1877. Māori Deeds of Land Purchases in the North Island of New Zealand. George Didsbury, Wellington. Accessed via New Zealand Electronic Text Collection, Victoria University.

## Appendix A - Archaeological Site Record Forms





# Site Record Form

NZAA Site Number:	P04/49	Site Coordinates (NZTM)	
Imperial Site Number:	N8/18	Easting:	1664832
Site Type:	Pa	Northing:	6128030
Site Name(s):	Okiore	Source:	CINZAS



Scale: 1:2,500

Disclaimer: Polygon may not reflect the full extent of the site

**Finding Aids to the Location of the Site:**

**Brief Description:**  
HEADLAND PA

**Condition of Site when last visited:**  
No Recent Info

Site Periods:

Indigenous pre-1769

Ethnicity:

Maori

Site Features:

Unclassified

Associated Sites:

Description:

Site area amended, and name added, as per SRF - 7/11/2013, Rick McGovern-Wilson

Condition Notes:



NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION		849 SITE NUMBER N8/18	
<b>SITE RECORD FORM</b> Map number 8 Map name Whangaroa Map edition I942? Grid Reference 2I3852		MAORI SITE NAME: OTHER	
		SITE TYPE Headland pa	
1. Aids to relocation of site <sup>E121300</sup> North end of Taupo Bay. <sup>N885200</sup>			
2. State of site; possibility of damage or destruction Good. Covered in scrub. Few pohutukawa on sea-front surround.			
3. Description of site (NOTE: This section is to be completed ONLY if no separate Site Description Form is to be prepared.) Levels prominent from main rectangular top platform. Low headland with rising land behind, good defence from sea. Cover makes detailed inspection difficult at present time.			
Okiore pa 757899 Lot 1 DP 63144 CT 31C/422 Terraview AW 06/2004			
4. Owner Probably Reserve. Address		Tenant/Manager Address	
Attitude		Attitude	
5. Methods and equipment used Photographs taken: Yes/No (Describe on Photograph Record Form) Date recorded			
6. Aerial photograph or mosaic No.		Site shows: Clearly/badly/not at all	
7. Reported by C. R. Hawn Address 6/72		Filekeeper J. S. Sene Date 26/4/73	