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

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

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

1. Pre-Lodgement Meeting

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

2. Type of Consent being applied for

(more than one circle can be ticked):

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

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

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

◯ **Yes** ✔ **No**

4. Consultation

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

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

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

5. Applicant Details

Name/s: Thomas Jay van Vliet and Catherine Hanneke van Vliet

Email: [redacted]

Phone number:

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

6. Address for Correspondence

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

Name/s:

Email:

Phone number: Work Home

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

Postcode

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: Thomas Jay van Vliet and Catherine Hanneke van Vliet

Property Address/ Location: [redacted]

8. Application Site Details

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

Name/s: Thomas Jay van Vliet and Catherine Hanneke van Vliet

Site Address/ Location: [redacted]

Legal Description:

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.

We would like to have 2x houses on the property. A main dwelling (approx 100 square meters) and a minor dwelling (minor dwelling is 80 squares) additional to this the minor dwelling is approx 33m away from the main one so we would like to apply for this as well.

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):

- [x] **Building Consent** Enter BC ref # here (if known)
- [ ] **Regional Council Consent (ref # if known)** Ref # here (if known)
- [ ] **National Environmental Standard consent** Consent here (if known)
- [ ] **Other (please specify)** Specify 'other' here

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

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

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

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

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

13. Assessment of Environmental Effects:

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

Your AEE is attached to this application ✔ **Yes**

13. Draft Conditions:

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

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

14. Billing Details:

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

Name/s: (please write in full) Thomas jay van Vliet

Email: tomvanvliet1@hotmail.com

Phone number: Work Home 021673199

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

71b Pa road, Kerikeri

Postcode 0230

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) Thomas jay van Vliet and Catherine Hanneke van Vliet

Signature:
(signature of bill payer

[redacted]

MANDATORY

15. Important Information:

Note to applicant

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

You may apply for 2 or more resource consents that are needed for the same activity on the same form.

You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application

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

Privacy Information:

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

15. Important information continued...

Declaration

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

Name: (please write in full) Thomas Jay van Vliet and Catherine Hanneke van Vliet

Signature: [redacted]

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

Checklist (please tick if information is provided)

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

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

BUILDING DETAIL
8 Tiraumea Drive, Pakaranga, Auckland

Framing	Size	Spacing	Type	Condition Rot/Borer	Recommendation
Bearers	90x70mm	1.5mts	Pine	Good	Acceptable
Floor joists	140x45mm	500mm	Pine	Good	Acceptable
Flooring	Ex. 90mm	T&G	Hardwood	Good	Acceptable
Wall Framing	100x50mm	Approx. 500mm	Pine	Good	Acceptable
Roof: Trusses	100x50mm rafters	450mm	Pine	Good	Acceptable
Roof: Purlins	Ex 40mm battens	350mm	Pine	Good	Acceptable
Under purlin struts/beam	100x75mm underpurlins, 100x50mm ties to every fourth rafter and a AV unit			Good	Acceptable

KEY: Good, Fair & Poor condition

	Type	Condition	Comments
Exterior cladding	Ex. 140mm horizontal timber weatherboard	Good	Acceptable
Interior Linings (Walls)	Gib/boards	Good	Acceptable
Interior Linings (Ceilings)	Hard flat plaster sheets	Good	Acceptable
Insulation (Floor)	None		
Insulation (Walls)	None		
Insulation (Ceiling)	Polyester blanket type	Good	Acceptable
Joinery:	Aluminums sectional joinery	Good	Acceptable
Roof	Concrete tiles	Good	Acceptable
Spouting	Pvc guttering and	Good	Acceptable

	downpipes		
Finish (Interior)	Painted walls and ceiling	Good	Acceptable
Finish (Exterior)	Painted exterior and roof	Good	Acceptable-wash down exterior cladding

GENERAL COMMENTS

The building elements are suitable for the building and are safe and sanitary for habitable use.

Christopher Swain, Building Consultant, NZCD
2/50 Kesteven Avenue, Glendowie
Phone 021 585 140 & Email:
christopherswainconsulting@gmail.com

5/05/2025
Far North District Council
Dear Sir, Ms.

REPORT ON: **House at 8 Tiraumea Drive, Pakaranga, Auckland**

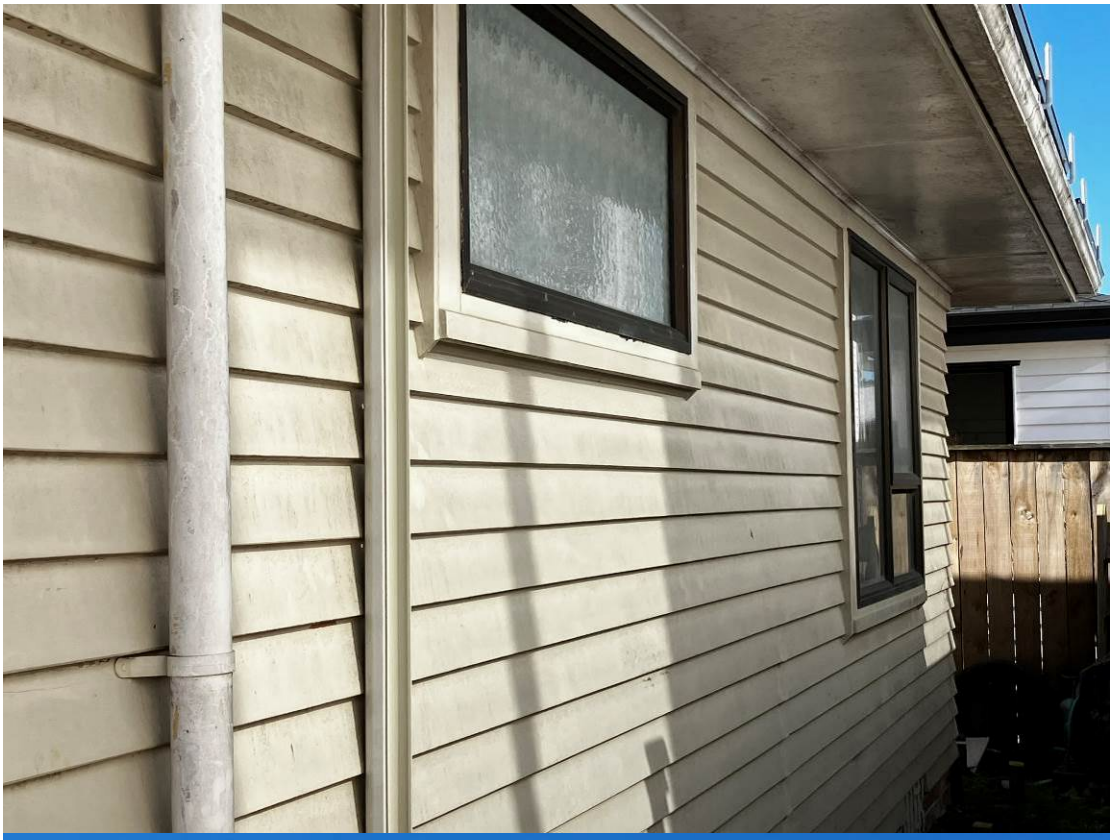
FOR: **Hanneke Kruger, Email: kruger.hanneke@gmail.com**

TO: **26 Tanekaha Lane, Kerikeri, Far North District Council**

BRIEF: I have inspected the described building as shown.

EXTERIOR AND GENERAL OBSERVATION

The existing single storey building has timber weatherboard cladding, timber stud framing, and a heavy tile roof.
The aluminium window joinery, was built to specifications acceptable at the time of construction with solid soffits.



The subfloor to the building has 140x45mm timber joists with 90x70mm bearers and a solid timber flooring throughout.
The ceiling space has 100x50mm rafters with battens, an AV unit and insulation.

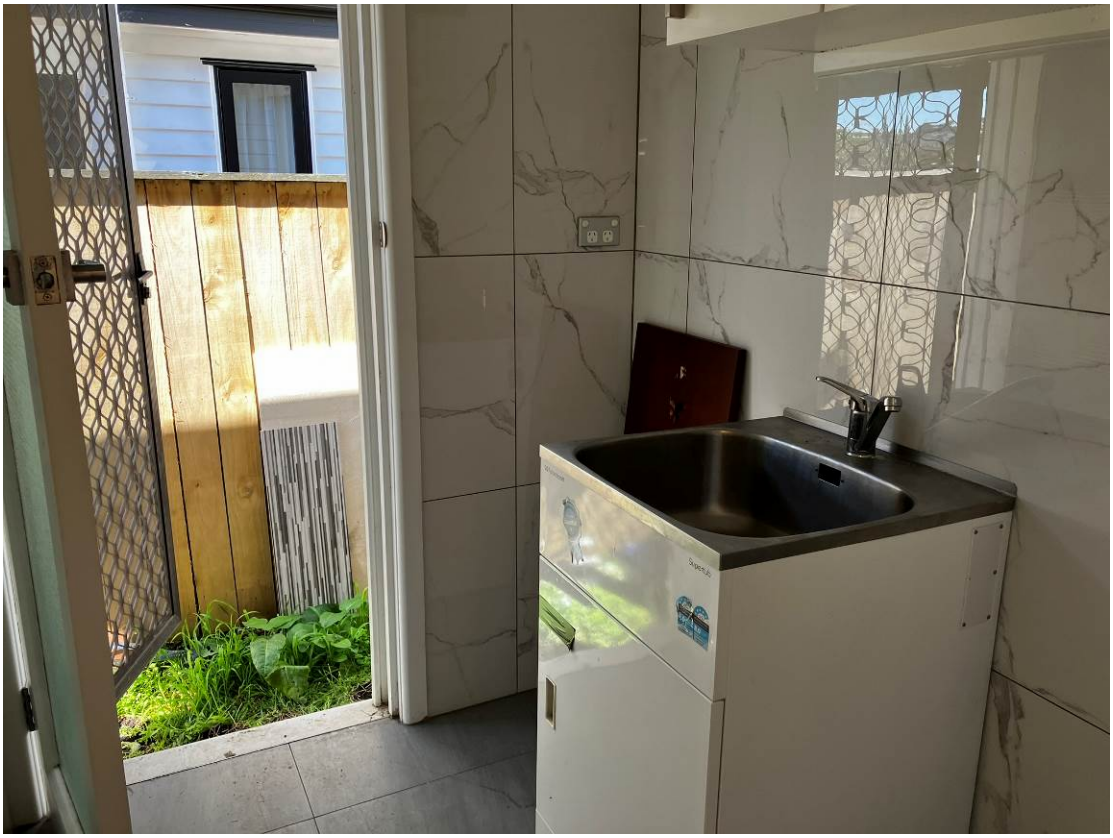
The kitchen has timber flooring, ceramic bench top and return, splash tiles, a stainless steel sink, cupboards underneath and wall fixed, an oven with a range hood, dishwasher, power points, and windows.

The lounge and dining area has timber flooring, an entry door, a heat pump, power points and widows.

The three bedrooms have timber flooring, with wardrobes power points and windows.

The hallway has timber flooring, a wall cupboard with timber shelving.

The laundry has ceramic tiled flooring, a stainless steel tub, wall tiles, power points and window.



The bathroom has ceramic tiled flooring and tiled walls, a heated towel rail, a WC, a vanity, a heat lamp, a walk in shower, window and with a separate toilet with a WC, ceramic tiles, wall tiles, a wash hand basin and window.

Smoke alarms will be provided to comply with F7/AS1.

NOTE:
A detailed condition sheet is attached to this report.
The building will be moved in two pieces.

EXCLUSIONS

This report has been prepared on the basis of a visual inspection of the premises using normal readily available access and without testing of components for the assessment of the overall structural condition of the house and associated items, and without recourse to the construction drawings.
No detailed technical investigation has been included in this brief.
No warranty can be given as to other defects not apparent to visual inspection at the time.

This report has been prepared solely for the benefit of the client, with respect to the brief, and the local City/ District Council.

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 party's sole risk.

RECOMMENDATION

The building is in a good condition and is safe and sanitary for habitable use.

Yours Sincerely

Christopher Swain NZCD
Building Consultant.
Ex. Waitakere Council Building Surveyor,
(Approved Building Inspector)

Far North Inspections

Condition Assessment Inspection Report

Tom van Vliet

26 Tanekaha Lane, Kerikeri

Inspection prepared for: Tom van Vliet
Date of Inspection: 24/7/2025

Craig Bacon
BP 122543
Phone: 0272 900998
Email: farnorthinspections@gmail.com
www.farnorthinspections.co.nz

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General Information

1. Inspection Brief

SCOPE OF INSPECTION.
•

The following building report is based on visual and non-destructive investigations.

The purpose of this report is to determine the buildings structural integrity and ascertain its condition following relocation.

The building is set up on temporary piles/blocks awaiting re-siting.

- The house is a single story timber framed building.
- The building is approximately 80 m2.

2. BuildingType/Description.

OBSERVATIONS:
- Residential dwelling.
- Single story timber framed light weight building.
- FOUNDATIONS:
- Proposed timber piles.
- CLADDING MATERIAL:
- Timber Weatherboards
- Hardiesheet/compressed cement sheeting.
- JOINERY:
- Aluminium joinery.
- Timber joinery single glazed.
- ROOFING MATERIAL:
- Corrugate Zincalume

Sub Floor

1. Timber Sub Floor Material/Condition

Observations:
• *FOUNDATION*

• *BEARERS*
• 2/150 x 50
• BEARER SPACING:
• 1800 mm
• 1500 mm
• CONDITION:
• Good Condition

• *FLOOR JOISTS*
• 150 X 50
• 250 X 50
• JOIST SPACING:
• 500 mm centres
• CONDITION:
• Good Condition
• RECOMMENDATION:
• Acceptable

2/150 × 50 mm bearers at varied centres.

150 × 50 mm joists at 500 mm centres.

250 x 50 mm joists at 500 mm centres under lounge.

Rimu timber joists installed.

Oregon timber joists installed.

Exterior Observations.

1. Claddings

Observations:
• *CLADDING MATERIAL*

• Ex 150 x 25 Bevel-back timber weatherboard.
• CONDITION:
• Acceptable
• Textured compressed sheeting.
• CONDITION:
• Acceptable
• Textured sheeting will need remedial work once house has been sited on foundations.

Textured Compressed sheet claddings installed.

Painted timber weatherboards installed.

2. Windows/Doors

Observations:
• *WINDOW TYPE*

• Aluminium joinery fitted to original timber surrounds.
• CONDITION:
• Acceptable

Aluminium joinery installed.

Timber rear door installed.

3. Fascias/Soffits

Observations:
• *FASCIA/BARGEBOARDS*

• Ex 150 x 25 Fascias and Bargeboards observed.
• CONDITION:
• Acceptable
• *SOFFITS*

• Soffits are 4.5 - 6mm compressed cement sheets.
• CONDITION:
• Acceptable

Timber fascias. Compressed sheet soffits and eaves.

Fascias and barges in good order.

4. Gutters/Downpipes

Observations:
• *GUTTER CONSTRUCTION/MATERIAL*

• PVC guttering observed.
• CONDITION:
• Gutters in good order.
Some gutters are not yet installed.
Gutters may need to be altered to suit future positions of stop ends and downpipes.
• Downpipes not connected to storm water as house not sited.

PVC gutters installed.

5. Roofing/Flashings

Observations:
• *ROOFING*

• Corrugate zincalume roofing.
• CONDITION:
• As new.
• *FLASHINGS*
• Zincalume flashings installed.
• Acceptable.

New zincalume roofing and flashings installed.

Roofing in good order.

Internal Observations

1. Floors, Walls, Ceilings

Observations:
• *FLOORS*

• Ex 150 × 20 Tongue and Groove Kaihikatea
• Ex 100 × 25 mm tongue and grooved Rimu
• CONDITION:
• Flooring is in good condition.
• *WALLS*

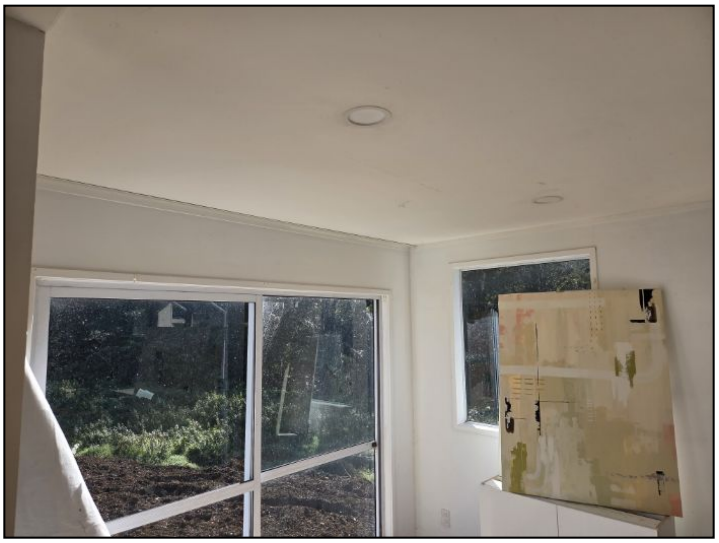
• 100 x 50 framing with plastered gib-board installed.
• CONDITION:
• Walls will need stopping when house is re-located.
• *CEILINGS*

• Ceiling joists are 100 x 50 @ 500crs with plastered gibboard ceiling lining
• CONDITION:
• Ceilings will need minor stopping when house is re-located.

Timber T&G flooring installed.

Gibboard internal linings.

Gib plastered ceilings installed.



Walls and ceilings in good order.

2. Roof Construction.

Observations:
• Roof framing consists of.
• *RAFTERS*

• 100 × 50 mm rafters at approx. 900 crs.
• *PURLINS*

• Purlins are 75 x 50 on flat at 900 crs.
• CONDITION.
• Acceptable.

3. Kitchen/Laundry

Observations:
• Kitchen sink, benches and cupboards are in acceptable condition.
• Bathroom fixtures appear in good order. Will need finishing off when house is sited.

Modern kitchen installed.

Final Conclusions

1. Comments/Non Complying items/Issues

Observations:

• The sub floor joists and bearers are in sound condition with suitable spacings of sub floor framing members.

• Claddings are in sound condition with some minor remedial works needed to sheeting when house is finally sited.

• Roofing is in good condition.

• Soffits and fascias are in good order.

• Gutters and downpipes are yet to be completed.

• Interior floors, walls and ceilings are in good condition.

• Remedial works will need to be completed to some walls to patch up deleted internal stairway.

• Remedial works will need to be completed and possibly renovate bathroom area.

• Overall, the building is in sound condition and suitable for relocation as a habitable dwelling.

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier **NA124C/881**

Land Registration District **North Auckland**

Date Issued 06 January 2000

Prior References
NA102A/534

Estate Fee Simple

Area 1.0787 hectares more or less

Legal Description Lot 2 Deposited Plan 197024

Registered Owners

Catherine Hanneke van Vliet and Thomas Jay van Vliet

Interests

Appurtenant hereto is a water supply right specified in Easement Certificate C907091.9 - 12.10.1995 at 2.05 pm

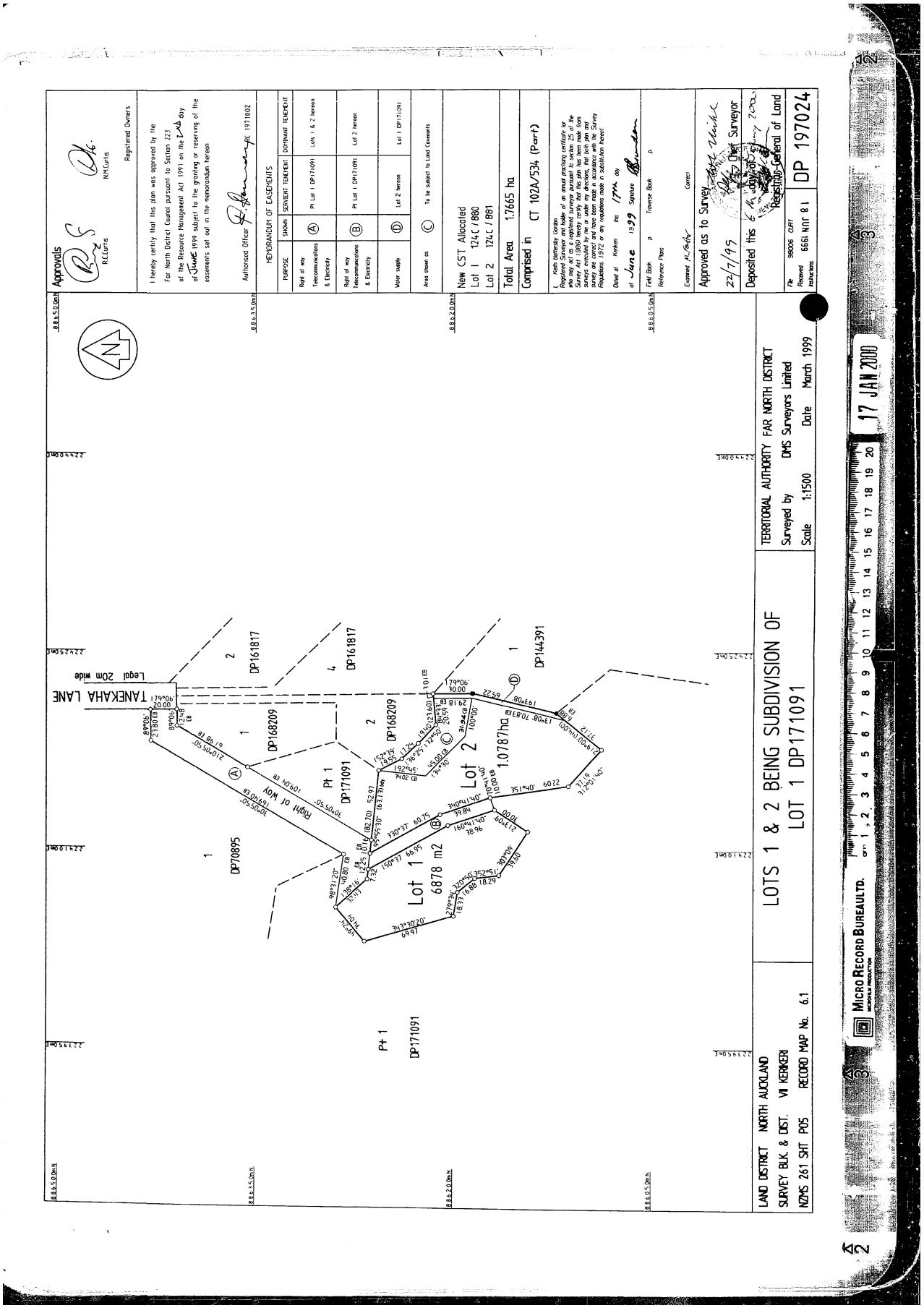
D468330.1 Consent Notice pursuant to Section 221(1)Resource Management Act 1991 by Far North District Council - 6.1.2000 at 2.04 pm

Appurtenant hereto are rights of way and telecommunications and electricity rights specified in Easement Certificate D468330.5 - 6.1.2000 at 2.04 pm

Subject to a water supply right over part marked D on DP 197024 specified in Easement Certificate D468330.5 - 6.1.2000 at 2.04 pm

The easements specified in Easement Certificate D468330.5 are subject to Section 243 (a) Resource Management Act 1991

Land Covenant in Easement Instrument 10509968.1 - 22.8.2016 at 10:46 am


Approvals
R.C.Curtis
N.M.Curtis
Registered Owners
I hereby certify that this plan was approved by the Far North District Council pursuant to Section 223 of the Resource Management Act 1991 on the 2nd day of June 1999 subject to the granting or reserving of the easements set out in the memorandum hereon
Authorised Officer
MEMORANDUM OF EASEMENTS
PURPOSE
SHOWN
SERVIENT TENEMENT
DOMINANT TENEMENT
Right of way Telecommunications & Electricity
Pt Lot 1 DP171091
Lots 1 & 2 hereon
Water supply
Lot 2 hereon
Lot 1 DP171091
Area shown as
To be subject to Land Covenants
New CST Allocated
Lot 1 124C/880
Lot 2 124C/881
Total Area 1.7665 ha
Comprised in CT 102A/534 (Part)
Keith Battersby Gordon
Registered Surveyor
Field Book
Traverse Book
Reference Plans
Examined
Correct
Approved as to Survey
22/7/99
Deposited this 6th day of January 2000
Land Registrar-General of Land
File Reference 98006 CURT
Received 17 JAN 2000
Instructions 6661 Nlr 81
DP 197024
TANEKAHA LANE
Legal 20m wide
Right of Way
Pt 1 DP171091
Lot 1 DP70895
Lot 2 DP168209
Lot 1 DP168209
Lot 2 DP161817
Lot 4 DP161817
Lot 1 DP144391
Lot 1 6878 m2
Lot 2 1.0787ha
LOTS 1 & 2 BEING SUBDIVISION OF LOT 1 DP171091
TERRITORIAL AUTHORITY FAR NORTH DISTRICT
Surveyed by DMS Surveyors Limited
Scale 1:1500 Date March 1999
LAND DISTRICT NORTH AUCKLAND
SURVEY BLK. & DIST. VI KERIKERI
NZMS 261 SHT P05 RECORD MAP No. 6.1
MICRO RECORD BUREAU LTD.

GUMBOOTS
CONSULTING ENGINEERS

' We SEEK to enable POSITIVE change through valuing PEOPLE with an invaluable SERVICE '

Onsite Wastewater Management Appraisal

26 Tanekaha Lane, Kerikeri

For

Tom & Hanneke Van Vliet

Supporting appraisal for consent application for a low impact onsite wastewater management system.
Gumboots Consulting Engineers reference 1348b

10th June 2025

◆0204486697 ◆office@gumbootsconsulting.co.nz ◆www.gumbootsconsultingengineers.co.nz
191 Onekura Road, Kerikeri, Northland 0295

Revision History

Revision N°	Prepared By	Description	Date
A	Kelly Wright	Onsite Wastewater Management Appraisal	10/06/2025

Reviewed/Approved

On behalf of Gumboots Consulting Engineers Ltd by:

Akira Kepu

Senior Chartered Geotechnical - Civil Engineer

CMEngNZ [1160185], Board Member of EngNZ Northland Branch.

Member of NZGS, ISSMGE, SIG EGP & The Sustainability Society.

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3. In-situ Soils

4. Site Walkover and Observations

5. Summary of Ground Conditions
- 5.1. Current Ground Condition
- 5.2. Groundwater

6. Onsite Wastewater Treatment-Land Application System

- On-site Wastewater Disposal Site Evaluation
- PS1
- Recommended Schedule of Work
- Appendix A

1. Introduction

This report has been prepared for Tom and Hanneke Van Vliet in support of an application to the Far North District Council for a Building Consent.

Where appropriate, it is in accordance with the recommendations of AS/NZS 1547 and ARC TP58 and related documents.

1.1 Objective and Scope

The objective of this report is to assess the general suitability of the site and design recommendations for an on-site wastewater management system and includes;

- Review of pertinent rules and policies
- Site walkover and observations and evaluation of general [sub]surface soil conditions
- Recommendations for onsite domestic effluent treatment/disposal
- Review of the proposed dwelling with due regard to the wastewater generated.

1.2 Limited Liability

This report has been prepared exclusively for Tom and Hanneke Van Vliet in accordance with the brief given to us, the agreed scope and in general accordance with current standards, codes and best practice at the time of this writing. Therefore, they shall be deemed the exclusive owner on full and final payment of the invoice.

Information, assumptions, and recommendations contained within this report can only be used for the purposes with which it was intended. Gumboots Consulting Engineers accepts no liability or responsibility whatsoever for;

1. any use or reliance on the report by any party other than the owner or parties working for or on behalf of the owner, such as local authorities, and for purposes beyond those for which it was intended.
2. any omissions or errors that may befall from inaccurate information provided by the Client or from external sources.

Outcomes given in this report are based on visual methods and subsurface investigations at discrete locations designed to the constraints of the project scope to provide the best assessment of the environment and subsurface conditions.

Therefore, it must be appreciated that the nature and continuity of the subsurface materials between these locations are inferred and that actual conditions could vary from that described herein.

We should be contacted immediately if the conditions are found to differ from those described in this report. Accordingly, further investigations/observations shall then be undertaken as appropriate.

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

2. Site Details and Description

2.1 Site Identification

Site Location:	26 Tanekaha Lane, Kerikeri
Legal Description:	Lot 2 DP 197024
Total Site Area:	1.0787 ha

2.2 Proposed Development

The proposed development is a 3 bdr relocatable dwelling and 2 bdr standalone unit, both with areas of hardstanding and gardens.

Our Client intends to plant and landscape the occupational area to encourage and upkeep the space in line with the current land use, existing natural environment and long term sustainability as the primary objective.

2.3 Site Description

The proposed effluent field site is currently occupied by pasture, is gently sloping (~ Avg 15^0) northward and located (~37m) to the south of the proposed building site. As depicted in Figure 2 below.

It is noted that the figure below is indicative only. It shall be subject to as-built plans which shall be provided by the contractor at completion of work. The plans shall account for [not limited to] all the work undertaken i.e. final application locations, setbacks and related.

During the site walkover inspection, boggy and/or saturated ground was not encountered. During intense rainfall events, it is anticipated that surface water will be absorbed in low-moderate volumes with the majority as sheetflow northwest to the swale drain bisecting the property.

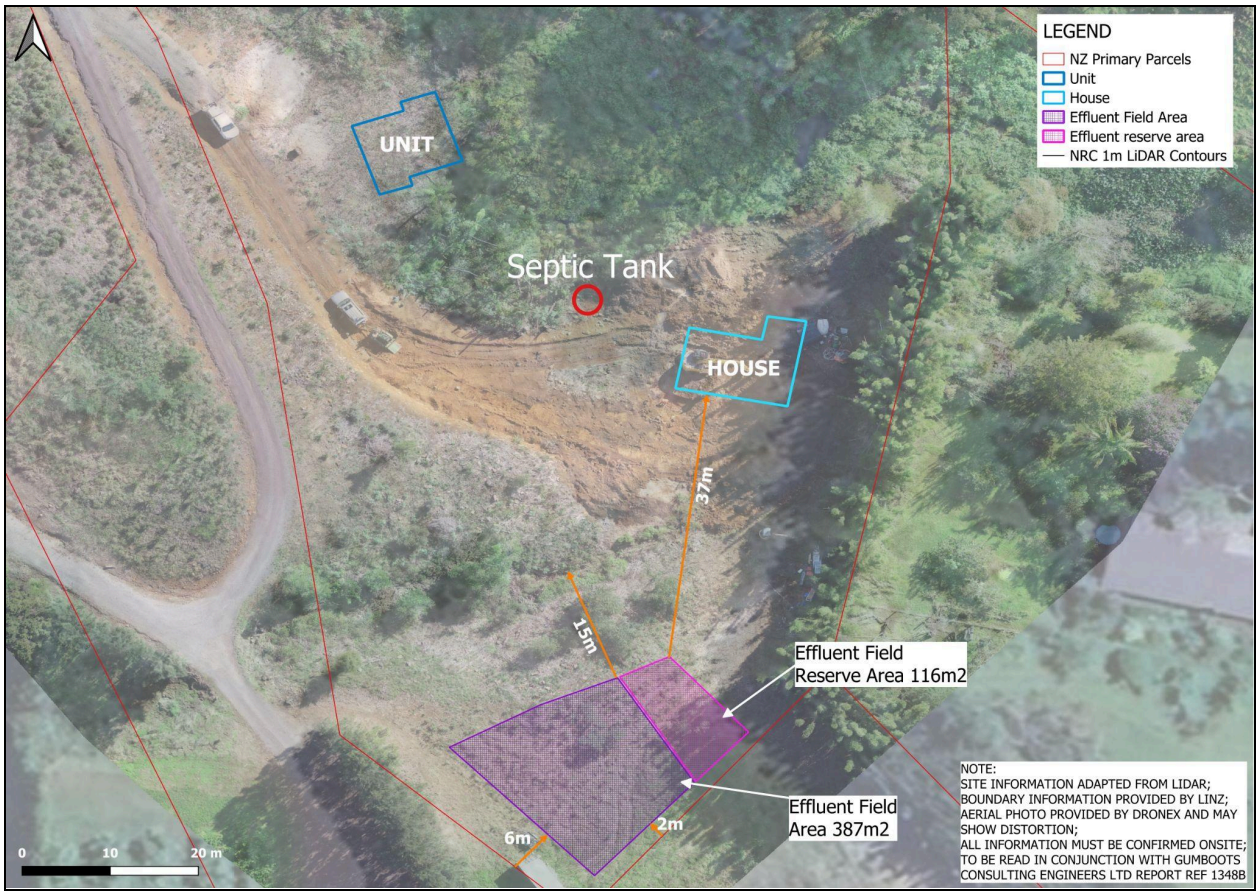


Figure 2. Effluent Field Location - (1m contour lines from NRC LiDAR 2018 - 2019. Scale = 1:250)

3. In-situ Soils

LandCare Research indicates the **soils** encountered here as Orthic Oxidic [XO]. These clayey soils result from the weathering of andesite, dolerite or basalt rock or ash over extensive periods of time. They cover 1% of New Zealand and are known only in the Auckland and Far North Region.

Oxidic soils are strongly weathered and clays have low cation exchange capacity at the natural pH of the soil. These soils have *slow permeability*. They contain appreciable amounts of iron and aluminium oxides well-developed, relatively stable structure. Clay contents are high, ranging from 50 to 90%. Soil water deficits are common in summer.

More reference can be noted that these are soils of the Rolling and Hill lands i.e. Pungaere gravelly friable clay (PG) - *moderately well drained*.

All in all, it can be concluded that the soils encountered here more greatly reflect the historical effects of local conditions.

The maps constitute a regional scale. Therefore, visual observations and shallow boreholes were utilised to account for this purpose. As specific to the subject site.

Reference:
Manaaki Whenua LandCare Research: New Zealand Soil Classification (NZSC) - Soil Order.

4. Site Walkover and Observations

Our site walkover and observations for this appraisal commenced on the 02nd and 19th of May 2025 and included;

- Hand augered boreholes.
- Site mapping with due regard to the existing services and supporting stormwater applications implemented and primary flow paths onsite.
- Recommendation for the most suitable OWMS[1] and land application.

5. Summary of Ground Conditions

5.1 Current Ground Condition

The natural subsoils comprise Silty CLAY content to depths of 2.90m. The ground surface was not boggy.

5.2 Groundwater

Was not encountered however, it would be prudent to note that groundwater levels are likely to fluctuate with the seasons/peak rainfall events.

The geological features which highly influence infiltration are highly varied over an outcrop and likely so from one to another. Therefore, a uniform distribution and infiltration of rain is highly *unlikely* and the consequent rise in water-table will be greater in some places than others.

[1] ***O**nsite **W**astewater **M**anagement **S**ystem.*

6. Onsite Wastewater Treatment-Land Application System

Table 1.1 - Onsite Wastewater Design Summary

Design Element	Specification
Development	3 bdrm home plus 2 bdrm unit
Wastewater load design	Volume 145 litres/ person/ day – 1,160 litres/ day
Water saving measures	Standard water saving fixtures - defined in TP58 as '*Dual flush 6/3 litre toilet cisterns, and includes aerator faucets, shower flow restrictors, water conserving automatic washing machines and restricted, standard automatic washing machine and dishwasher, no garbage grinder.'*
Water meter required	No
Min. Treatment Quality	Secondary
Soil Drainage Category	TP58 category 5 or AS/NZS1547 category 4
Soil Loading Rate	3 mm/ day [Table L1 AS/NZS1547].
Primary disposal field area	387m^2
Reserve disposal field area	30 %. Total Footprint area of 116m^2
Disposal Field Level	No provisions required, disposal field not recorded within mapped flood hazard area nor is it within close proximity to boundaries. Raised above 5 % AEP event.
Dosing Method	Pump
Emergency storage	Minimum 24-hour emergency storage volume within septic tank.
Overland Hydraulic Control	N/A

The land in the vicinity of the proposed dwelling has been assessed for effluent suitability with respect to the Proposed Regional Plan for Northland (PRP, August 2020), ARC TP58 and AS/NZS 1547.

The soils across the site were found to be TP58 category 5 or AS/NZS1547 category 4.

Following interpretation of field data and review of published data, it is concluded and recommended that:

1. The **recommended** onsite wastewater management system shall be a s**econdary treatment system** with **drip line** land application.

2. The system shall cater for a **maximum loading** of **1,160**L/d i.e. generated wastewater from an occupancy number of **8 people** for a **3 bedroom** home and **2 bedroom** unit.[2]

3. The design effluent field consists of; a **primary field of 387 m²** + a **reserve area of 116 m²** = 503 m²

4. The adopted daily infiltration rate is based on Table M1 AS/NZS 1547.

5. There is sufficient land capacity within the site for discharge and reserve areas with appropriate separation distances from boundaries and surface water. Pressure Compensating Dripper Irrigation (**PCDI**) to be installed over 387m² within the area shown as suitable on the Wastewater Field Location Plan appended. The shape/layout of this area may be altered provided offsets are maintained and the field remains within the Effluent Disposal.

6. It is **recommended** that >150mm excess topsoil [from site stripping] shall be placed evenly across the effluent field as extra subgrade. Therefore providing sufficient buffering estate thereupon.

7. **Flush valves** to be installed **on each drip line** for maintenance purposes and shall adopt a **timer dose loading method**.

8. **Non-return valves** shall be installed on each of the **dripper lines**. A full clean water pump test of the dripper lines shall be carried out to ensure even distribution of wastewater within the field is evident.

9. Best industry practices with regard to drip line runs [along the contours] for optimal efficiency shall be exercised at all times.

10. The contractor shall confirm the effluent field setbacks onsite with due regard to the indicated field location within the plans attached.

11. Moreover, recommendations within shall be understood fully by the installer and in accordance with the manufacturer's requirements, prior commencing work.

12. A maintenance agreement shall be entered into with the provider. Once commissioned the plant will operate automatically with alarms fitted to advise the house occupants in the event of emergency failure.

13. All installation of on-site wastewater management and disposal systems must be undertaken or supervised by a certified drainlayer.

14. **Certificate of Work [PS3]**, as-built plans and in accordance with AS/NZS 1547:2012 - Section 6.2.5.4 shall be provided by the drainlayer [contractor] at the completion of work.

15. **As-built plans** shall confirm final treatment & land application system location, specifications and setbacks i.e. from property boundary, water courses and natural flow paths.

[2] *based on the maximum [people] hosting capacity of the proposed space.*

Gumboots Consulting Engineers Ltd | 191 Onekura Rd, Kerikeri 0295
P 0204486697 | E office@gumbootsconsulting.co.nz

FAR NORTH DISTRICT COUNCIL
Appendix E TP58
On-site Wastewater Disposal Site Evaluation
Investigation Checklist

Part A –Owners Details

1. Applicant Details:

Applicant Names	***Tom & Hanneke Van Vliet***
Company Name	
Property Owner Name(s)	***Tom & Hanneke Van Vliet***

Nature of Applicant*	***Owner***

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

2. Consultant / Site Evaluator Details:

Consultant Name	***Gumboots Consulting Engineers Ltd***
Site Evaluator Name	***Akira Kepu***
Postal Address	***191 Onekura Rd*** ***Kerikeri*** ***0295***
Phone Number	***0204486697***
Email Address	***office@gumbootsconsulting.co.nz***

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

Yes		**No**	✓

(Please tick one)

If Yes, give reference numbers and description;

4. List any other consent in relation to this proposal site and indicate whether or not they have been applied for or granted
If so, specify Application Details and Consent No. (eg. LandUse, Water Take, Subdivision, Earthworks Stormwater Consent)

Onsite Wastewater Management System

Part B- Property Details

1. Property for which this application relates:

Physical Address of Property	***26 Tanekaha Lane, Kerikeri***
Territorial Local Authority	***FAR NORTH DISTRICT COUNCIL***
Regional Council	***NORTHLAND REGIONAL COUNCIL***
Legal Status of Activity	**Permitted:** ✓ **Controlled:** **Discretionary:**
Relevant Regional Rule(s) (Note1)	***C6.1.3***
Total Property Area (Ha)	***1.0787 Ha***
Map Grid Reference (If known)	

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

Lots No.	**DP No.**	**CT No.**

2	*197024*	

Other (Specify):	

Please ensure copy of Certificate of Title is attached

PART C: Site Assessment - Surface Evaluation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation and Sn 5.2.2(a) Site Surface Evaluation)
Note: Underlined terms defined in Table 1, attached

Has a relevant property history study been conducted?

Yes		**No**	✓

(Please tick one)

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

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

Yes		**No**	✓

(Please tick one)

If No, why not?

Ground had no instability markers encountered during observations

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

Author	
Company	
Date or report	

Brief Description of findings:

2. Site Characteristics (See Table 1 attached):
Provide descriptive details below;

Performance of Adjacent Systems:	***No problems known***
Estimated Rainfall and Seasonal Variation:	***1800 mm per year. 1100 mm winter, 700 mm summer***
Vegetation / Tree Cover:	***Pasture and areas of established vegetation >50% canopy cover.***
Slope Shape: (Please provide diagrams)	***Gently sloping***
Slope Angle:	***~ 15 degrees***
Surface Water Drainage	***Soakage and sheet flow.***

Characteristics:	
Flooding Potential: YES/NO ***If yes, specify relevant flood levels on appended site plan, I.e. one in 5 years and/or 20 year and/or 100 year return period flood level, relative to disposal area.***	***No***
Surface Water Separation:	***Achieved - Disposal field & Reserve area ~15m from swale drain [west].***
Site Characteristics: or any other limitation influencing factors;	***None***

3. Site Geology **Check Rock Maps**

The geological information on hand indicates that the site is underlain by Kerikeri Volcanic Group (Pvb).

Geological Map Reference Number	***NZMS 290 rock and soils maps***

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

North	✓	**West**	
North-West		**South-West**	
North-East		**South-East**	
East		**South**	

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

Separation Distance from	Treatment Separation Distance (m)	Disposal Field Separation Distance (m)	FNDC minimum
Boundaries	***>1.5 m***	***>1.5 m***	**1.5**
Surface water, creeks, drains	***> 15 m***	***> 15 m***	**15**
Groundwater	***> 0.9m***	***> 0.9m***	**0.6**
Stands of Trees/Shrubs	***na***	***na***	**na**
Wells, water bores	***na***	***>20***	**20 m**
Embankments/retaining walls	***na***	***na***	**3 m**
Buildings	***> 3 m***	***> 3 m***	**3 m**
Rivers, Coastal Marine area	***> 30 m***	***> 30 m***	**30 m**

PART D: Site Assessment - Subsoil Investigation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation, and Sn 5.2.2(a) Site Surface Evaluation and Sn 5.3 Subsurface Investigations)
Note: Underlined terms defined in Table 2, attached

1. Please identify the soil profile determination method:

Test Pit		**(Depth_____*0.0*___m**	**No of Test Pits**		
Bore Hole	✓	**(Depth__*up to 2.90* m**	**No of Bore Holes**	*4*	
Other (specify):					

Soil Report attached?

Yes	✓	**No**		**Please tick**

2. Was fill material intercepted during the subsoil investigation?

Yes		**No✓**		**Please tick**

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

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

Please specify the method					
Test Report Attached?	**Yes**		**No**	✓	**Please tick**

4. Are surface water interception/diversion drains required?

Yes		**No**	✓

(Please tick one)
If yes, please show on site plan.
Subject to final development plans.

4a Are subsurface drains required?

Yes		**No**	✓

(Please tick one)

If yes, please provide details	

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

Winter	**>1.2**	**Measured/Estimated**	***Measured***

Summer	**>20m**	**Measured/Estimated**	***Estimated***

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

Yes		**No**	✓

(Please tick one)

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

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

Is Topsoil present? ***Yes***	**If so, Topsoil depth?** ***0.20(m)***

Soil Category	Description	Drainage	Tick One
1	Gravel, Coarse Sand	Rapid Draining	
2	Coarse to Medium Sand	Free Draining	
3	Medium-fine & loamy Sand	Good Drainage	
4	Sandy loam, loam & silt loam	Moderate Drainage	
5	Sandy clay-loam, clay loam & silty clay loam	Moderate to slow drainage	✓
6	Sandy clay, non-swelling clay & silty clay	Slow draining	
7	Swelling clay, grey clay, hardpan	Poorly or non-draining	

Reasons for placing in stated category;
Soil map classification, soil colour and texture investigation

PART E: Discharge Details

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

Rainwater (roof collection)	✓
Bore/well	
Public supply	

2. Calculate the maximum daily volume of wastewater to be discharged, unless accurate water metre readings are available
(Refer TP58 Table 6.1 and 6.2)

Number of bedrooms	**5**	
Design Occupancy	**8**	**(Number of people)**
Per Capita Wastewater production	**145✓ 160 180 200 220**	**(Litres per person per day - tick one)**
Daily Wastewater production	**1,160**	**(Litres per day)**

3. Do any special conditions apply regarding water saving devices?

Full Water Conservation Devices	**Yes**		**No**	✓
Water Recycling - what %?	**Yes**		**No**	

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

Refer to Report

4. Is Daily Wastewater Discharge Volume more than 3000 litres:

Yes	
No	✓

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

5. Gross Lot Area to Discharge Ratio:

Gross Lot Area	***10,787***	**m^2**

Total Daily Wastewater Production	***1,160***	**(Litres per day)(From above)**
Lot Area to discharge ratio	***9***	

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

Yes	✓	**No**	

(Please tick one)
Not an NRC Requirement

8. Is a Northland Regional Council Discharge Consent Required?

Yes		**No**	✓

(Please tick one)

PART F: Primary Treatment (Refer TP58 Section 7.2)

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

Number of Tanks	Type of Tank	Capacity of Tank (Litres)
N/A Secondary Treatment		
	Total Capacity	

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

PART G: Secondary and Tertiary Treatment
(Refer TP58 Section 7.3, 7.4, 7.5 and 7.6)

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

Secondary Treatment	✓
Home aeration plant	
Commercial aeration plant	
Intermediate sand filter	
Recirculating sand filter	
Recirculating textile filter	
Clarification tank	
Tertiary Treatment	
Ultraviolet disinfection	
Chlorination	
Other	

If Other please specify:

PART H: Land Disposal Method
(Refer TP58 Section 8)

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

Gravity	
Dosing Siphon	
Pump	✓

2. High water level alarm to be installed in pump chambers (please tick one);

Yes	✓	**No**	

If not to be installed, explain why

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

Total Design Head	***As per supplier specifications***	**m**
Pump Chamber Volume		**litres**
Emergency Storage Volume		**litres**

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

Surface Dripper Irrigation	✓
Subsurface Dripper irrigation	
Standard Trench	
Deep Trench	
Mound	
Evapo-transpiration Beds	
Other	

If Other please specify:

Raised Bed

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

Loading Rate	**3**	**(Litres/m 2 /day)**
Disposal Area	**Design (m^2)**	**387**
	Reserve (m^2)	**116**

Explanation (Refer TP58 Sections 9 and 10)

AS/NZS1547 recommends design irrigation rate for secondary treated effluent of 3mm/day in Category 4 soils.

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

Reserve Disposal Area (m²)	**116 m^2**
Percentage of Primary Disposal Area (%)	**30%**

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

Description and Dimensions of Disposal Field:

- ***Lines to be laid 1.00 m apart and disposal field to be planted with evapotranspiration species.***
- ***Flush valves installed at the end of each line. Shall adopt a timer dose loading method.***
- ***Best industry practices with regard to drip line runs for optimal (site) efficiency shall be exercised at all times***

Plan attached?	**Yes**	✓	**No**	

If not, explain why;

PART I: Maintenance & Management
(Refer TP58 Section 12.2)

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

Yes		**No**	✓

Name of Suppliers:

Supplier to be determined

PART J: Assessment of Environmental Effects

1. Is an assessment of environmental effects (AEE) included with application?
(Refer TP58 section 5. Ensure all issues concerning potential effects addressed)

Yes	✓	**No**	

If Yes, list and explain possible effects:

PART K: Is Your Application Complete?

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

Fully Complete this Assessment Form	✓
Include a Location Plan and Site Plan (with Scale Bars)	✓
Attach an Assessment of Environmental Effects (AEE)	✓

1. Declaration

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

Name	***Akira Kepu***	**Signature**	
Position	***Civil Engineer***	**Date**	**10.06.2025**

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

Building Code Clause(s) G13/VM4

PRODUCER STATEMENT – PS1 – DESIGN

(Guidance on use of Producer Statements (formerly page 2) is available at www.engineeringnz.org)

ISSUED BY: Gumboots Consulting Engineers — Job #: 1348b
(Design Firm)

TO: Tom & Hanneke Van Vliet
(Owner/Developer)

TO BE SUPPLIED TO: Far North District Council
(Building Consent Authority)

IN RESPECT OF: Onsite Wastewater Management System Report
(Description of Building Work)

AT: 26 Tanekaha Lane
(Address)

Town/City: Kerikeri **LOT** 2 **DP** 197024 **SO**
(Address)

We have been engaged by the owner/developer referred to above to provide:

A site feasibility appraisal for an Onsite Wastewater Management System application in accordance with technical publication TP58 with due regard to the suitable level of wastewater treatment required, site conditions, proposed development and existing subsoil and land capacities to accept/manage output wastewater.
(Extent of Engagement)

services in respect of the requirements of Clause(s) G13/VM4 of the Building Code for:

☐ All or ■ Part only (as specified in the attachment to this statement), of the proposed building work.

The design carried out by us has been prepared in accordance with:

■ Compliance Documents issued by the Ministry of Business, Innovation & Employment AS/NZS1547 or
(verification method/acceptable solution)

☐ Alternative solution as per the attached schedule

The proposed building work covered by this producer statement is described on the drawings titled:

1348b/01 - Wastewater Field Location Plan and ~~numbered~~ in full context of our appraisal (only)
together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to:
(i) Site verification of the following design assumptions site verification of the soil types, effluent field size/appropriate treatment
(ii) All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the design have the necessary competency to do so. I also recommend the following level of construction monitoring/observation:

☐ ~~CM1~~ ☐ ~~CM2~~ ☐ ~~CM3~~ ☐ ~~CM4~~ ☐ ~~CM5 (Engineering Categories)~~ or ■ as per agreement with owner/~~developer (Architectural)~~

I, Akira Kepu [CMEngNZ -1160185] am: ☐ CPEng ..... # ☐ Reg Arch ..... #
(Name of Design Professional)

I am a member of: ■ Engineering New Zealand ☐ NZIA and hold the following qualifications: ADEng (Civil/Struc)
The Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than $200,000*.
The Design Firm is a member of ACENZ: ☐

SIGNED BY Akira Kepu [CMEngNZ -1160185] (Signature)
(Name of Design Professional)

ON BEHALF OF Gumboots Consulting Engineers Date 12/06/2025
(Design Firm)

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of $200,000.*

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

PRODUCER STATEMENT PS1 October 2013 (reissued October 2017)

GUIDANCE ON USE OF PRODUCER STATEMENTS

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects, Institution of Professional engineers New Zealand (now Engineering New Zealand), Association of Consulting Engineers New Zealand in consultation with the Building Officials Institute of New Zealand. The original suit of producer statements has been revised at the date of this form as a result of enactment of the Building Act (2004) by these organisations to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with reasonable grounds for the issue of a Building Consent or a Code Compliance Certificate, without having to duplicate design or construction checking undertaken by others.

PS1 Design Intended for use by a suitably qualified independent design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;

PS2 Design Review Intended for use by a suitably qualified independent design professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;

PS3 Construction Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 2011[2]

PS4 Construction Review Intended for use by a suitably qualified independent design professional who undertakes construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.

This must be accompanied by a statement of completion of building work (Schedule 6).

The following guidelines are provided by ACENZ, Engineering NZ and NZIA to interpret the Producer Statement.

Competence of Design Professional

This statement is made by a Design Firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its designers.

A competent design professional will have a professional qualification and proven current competence through registration on a national competence based register, either as a Chartered Professional Engineer (CPEng) or a Registered Architect.

Membership of a professional body, such as Engineering New Zealand (formerly IPENZ) or the New Zealand Institute of Architects (NZIA), provides additional assurance of the designer's standing within the profession. If the design firm is a member of the Association of Consulting Engineers New Zealand (ACENZ), this provides additional assurance about the standing of the firm.

Persons or firms meeting these criteria satisfy the term "suitably qualified independent design professional".

***Professional Indemnity Insurance**
As part of membership requirements, ACENZ requires all member firms to hold Professional Indemnity Insurance to a minimum level.

The PI Insurance minimum stated on the front of this form reflects standard, small projects. If the parties deem this inappropriate for large projects the minimum may be up to $500,000.

Professional Services during Construction Phase
There are several levels of service which a Design Firm may provide during the construction phase of a project (CM1-CM5 for Engineers[3]). The Building Consent Authority is encouraged to require that the service to be provided by the Design Firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4
Building Consent Authorities should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the Design firm's engagement.

Attached Particulars
Attached particulars referred to in this producer statement refer to supplementary information appended to the producer statement.

Refer Also:

1 Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013

2 NZIA Standard Conditions of Contract SCC 2011

3 Guideline on the Briefing & Engagement for Consulting Engineering Services (ACENZ/IPENZ 2004)

4 PN Guidelines on Producer Statements

www.acenz.org.nz
www.engineeringnz.org
www.nzia.co.nz

Producer Statements PS1, PS2, & PS4 2 October 2013 (reissued October 2017)

GUMBOOTS
CONSULTING ENGINEERS

191 Onekura Road, Kerikeri, 0295
+64 204 486 697
office@gumbootsconsulting.co.nz

12th June 2025

Job #1348b

Tom & Hanneke Van Vliet

26 Tanekaha Lane, Kerikeri

Lot 2 DP 197024

Recommended Schedule of Work [SOW]

This schedule is specific to the above project and the work cited within the PS1. It shall be undertaken in full context of our OWM Appraisal, site and related engineering documents.

Installation and Construction:

1. Treatment plant system shall be implemented in accordance with the manufacturer's specifications.
2. Set out and prepping shall comply in accordance with the recommendations within the appraisal. Subject to final confirmation by Contractor onsite.
3. Construction shall comply [in accordance] with TP58; Ch12 - Sections 12.1 - 12.1.3.7 & AS/NZS 1547 : 2012 - Section 6.

Completion Certificate from qualified drainlayer (PS3) specific context [but not limited to] TP58; Sections: 12.1.3.3 - 12.1.3.6 & AS/NZS 1547:2012 - C6.2.5.4 and any outstanding QA documentation.

Limitation:

This schedule has been prepared solely for the benefit of Tom & Hanneke Van Vliet, for the onsite wastewater management system application. No responsible liability shall be assumed by Gumboots Consulting Engineers for any omissions or errors that may befall from inaccurate information provided by the Client or from external sources.

On behalf of Gumboots Consulting Engineers Ltd:

Akira Kepu

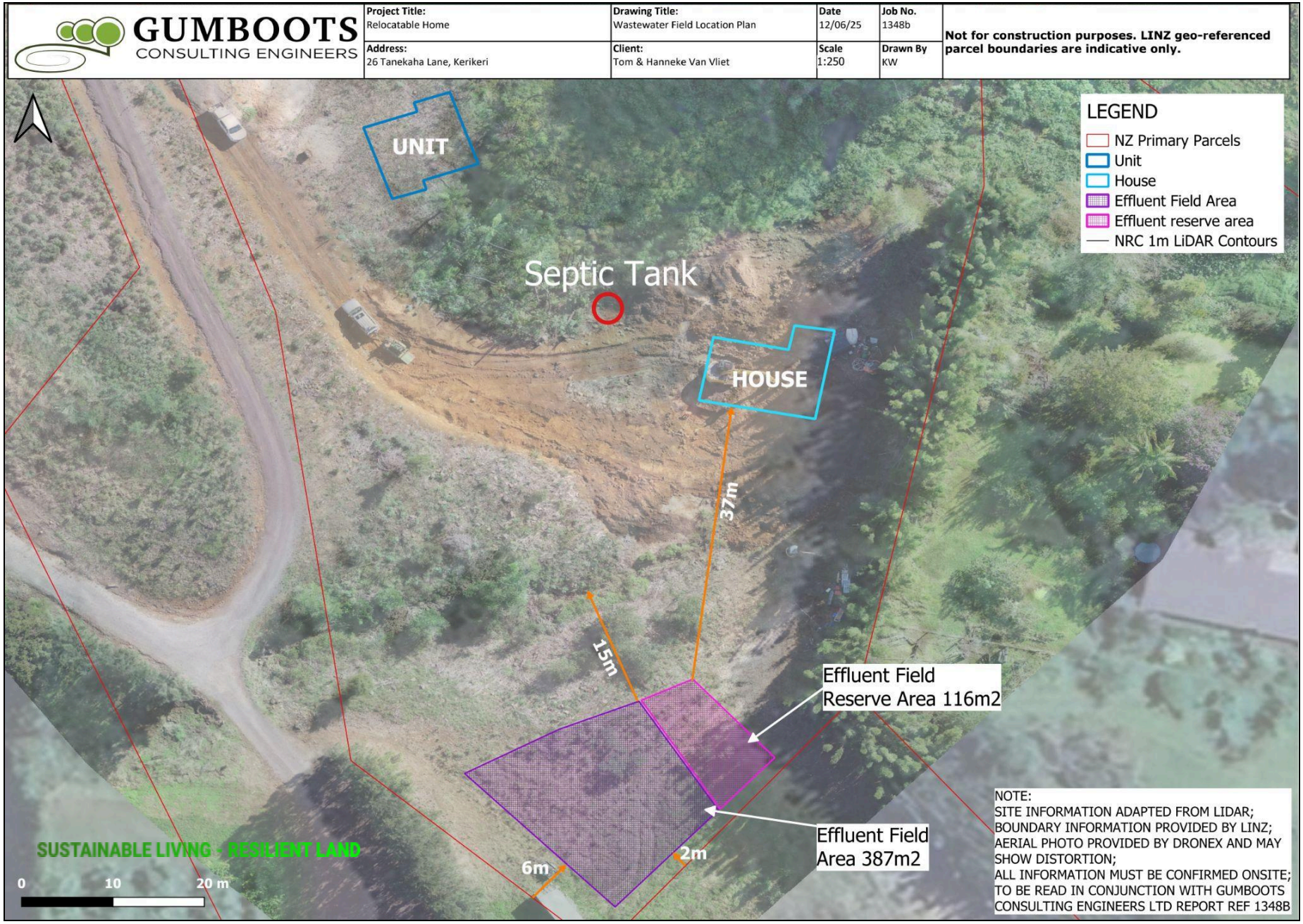
Senior Chartered Civil (Geo) Engineer,

CMEngNZ [1160185], Board Member of EngNZ Northland Branch.

Member of NZGS, ISSMGE, SIG EGP & The Sustainability Society.

Appendix A

Item	Attachments	Scale
1348b/01	Wastewater Field Location Plan	1:250
1348b/02	Geology and Lithology	-
1348b/03	Natural Hazards	-
1348b/04	Environmental Setting	-
1348b/05	Borehole Log 1	-


GUMBOOTS
CONSULTING ENGINEERS
Project Title: Relocatable Home
Drawing Title: Wastewater Field Location Plan
Date 12/06/25
Job No. 1348b
Address: 26 Tanekaha Lane, Kerikeri
Client: Tom & Hanneke Van Vliet
Scale 1:250
Drawn By KW
Not for construction purposes. LINZ geo-referenced parcel boundaries are indicative only.
LEGEND
NZ Primary Parcels
Unit
House
Effluent Field Area
Effluent reserve area
NRC 1m LiDAR Contours
UNIT
Septic Tank
HOUSE
37m
15m
Effluent Field
Reserve Area 116m2
Effluent Field
Area 387m2
6m
2m
SUSTAINABLE LIVING - RESILIENT LAND
0
10
20 m
NOTE:
SITE INFORMATION ADAPTED FROM LIDAR;
BOUNDARY INFORMATION PROVIDED BY LINZ;
AERIAL PHOTO PROVIDED BY DRONEX AND MAY SHOW DISTORTION;
ALL INFORMATION MUST BE CONFIRMED ONSITE;
TO BE READ IN CONJUNCTION WITH GUMBOOTS CONSULTING ENGINEERS LTD REPORT REF 1348B

1348b/02 Geology and Lithology

Geology

The geological information on hand indicates the site **geology** as Kerikeri Volcanic Group (Pvb); comprising basalt lava, volcanic plugs and minor tuff.

Lithology

The **lithology** comprises basalt [$F6_2$] i.e. flows and cones of very fine to medium grained crystalline basalt. Surfaces form terraces and plateaus generally without rocky outcrops. Dense and moderately fractured; hard to very hard. Landscapes are generally terraces and plateaus without rocky outcrops. Weathered to soft red brown or dark grey brown clay to depths of 20m with many rounded corestones.

References:

Geology of the Whangarei Area. Institute of Geological & Nuclear Sciences; 1: 250,000 geological map 2. Lower Hutt, New Zealand.

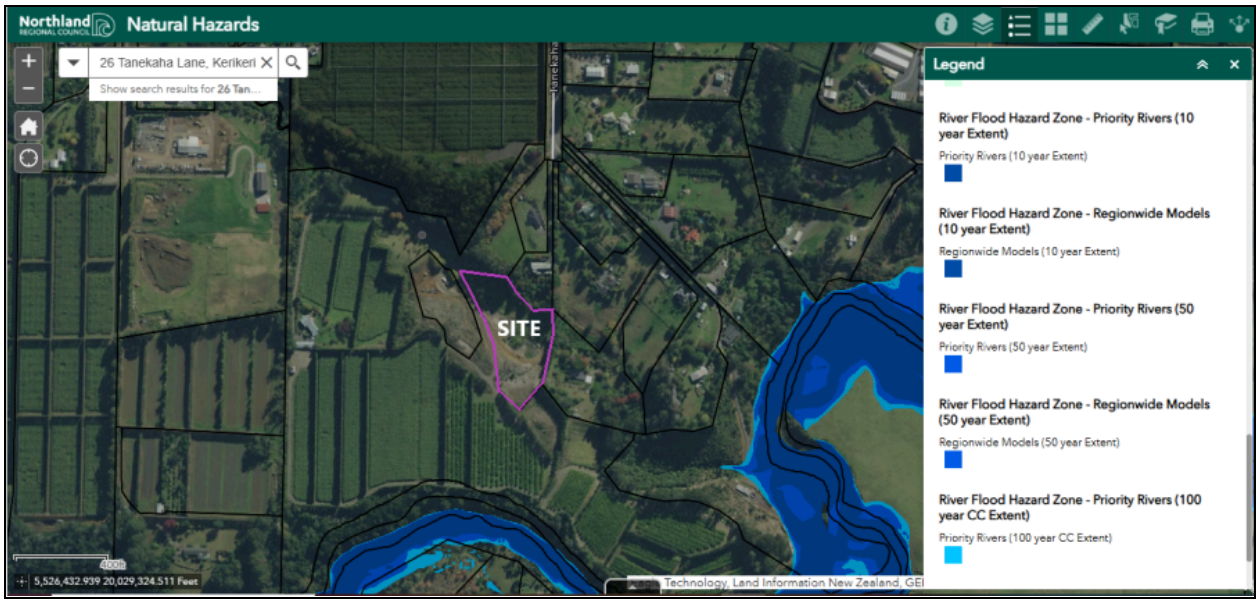
NZMS Sheet 290 P 04/05, part sheet O 03, 1:100,000 scale map, Edition 1, 1982: "*Whangaroa-Kaikohe"* (Rocks).

Manaaki Whenua LandCare Research: New Zealand Soil Classification (NZSC) - Soil Order.

1348b/03 Natural Hazards

Under Section 2 of the Resource management Act 1991, natural hazard means any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.

Upon review of the Northland Regional Council Hazards maps, it indicates the subject site is not within a flood extent area. As depicted below;



Natural Hazards Map (map adapted from NRC Natural Hazard Maps)**.**

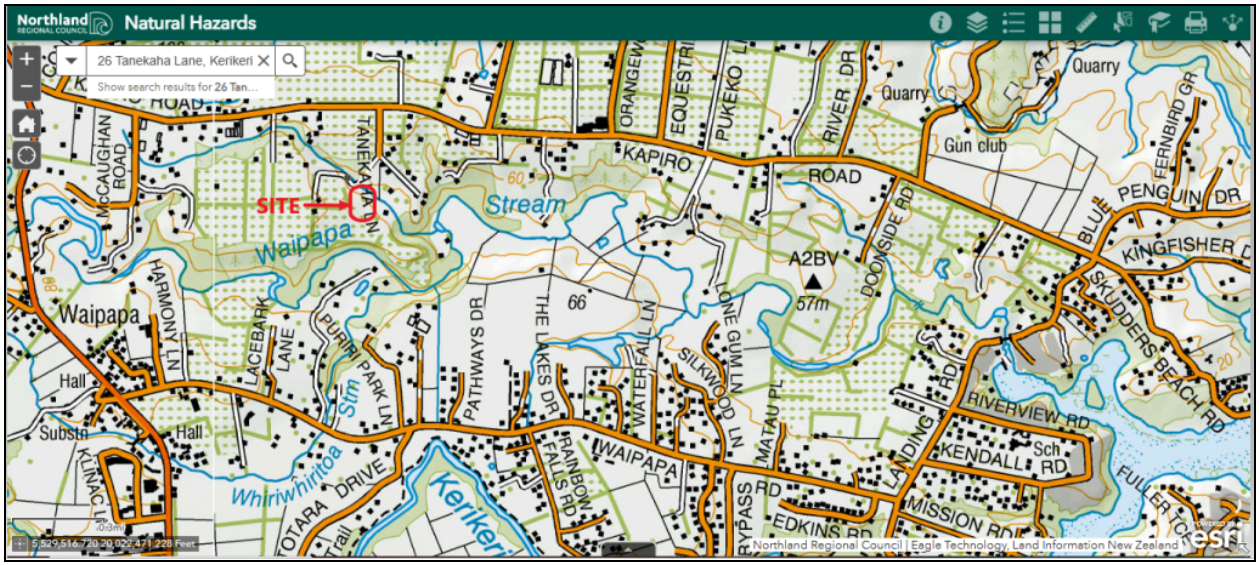
1348b/04 Environmental Setting

A summary of available information pertaining to hydrology and hydrogeology is presented in the table below. An examination of Far North District Council (FNDC) and Northland Regional Council (NRC) online GIS databases is included.

Table 1.1 – Surface Water Features & Flooding

Source	Presence/Location	Comments
Groundwater sources including springs/wells (within 500 m)	None recorded	
Surface Water Features (Ponds, Lakes etc)	None recorded	
Watercourses (within 500 m)	Waipapa Stream meanders west - east within the property boundary (north). The stream serves as a tributary to the wider Pickmere Channel (east).	The effluent field is sufficiently setback from this natural water feature which constitutes the wider northern aspect of the development site.
Flood Risk Status	None recorded	The NRC and FNDC GIS databases indicate that the subject property is not included within the

		area that has been modelled for flood hazard events.
Flood Susceptibility	Negligible	Flood susceptible land is mapped according to the presence of alluvial, fluvial deposited soils indicating historic inundation by flood waters. From available geological mapping and land relief, it is considered that the nominated area is not at risk of inundation by flooding.



Site and Surrounding Water Bodies Feature - (adapted NRC Natural Hazards map)

1348b/05 - Borehole Log 1

191 Onekura Rd
Kerikeri
Bay of Islands
New Zealand

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gumbootsconsulting@gmail.com

BOREHOLE LOG No. 1 — Hole Location: Refer to Site Plan — **JOB No. 13 48**

CLIENT:	Tom van Vliet	**SITE:**	26 Tanekaha Lane, Kerikeri.		
Date Started:	02/05/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	AK
Date Completed:	02/05/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	KW

Soil Description (Based on NZGS Logging Guidelines 2005)	Depth (m)
Silty CLAY, brown to yellowish brown, very stiff, moist and high palsticity.	
moist	0.5
moist	
brown, very stiff, damp and high plasticity.	1.0
orangish brown damp	
inclusion of fine to medium sub rounded gravels	1.5
pinkish red clayey streaks damp and very stiff	
grey speckles of silt	2.0
inclusion of fine to medium sub rounded gravels damp	
brown damp	2.5
EOBH @ 2.50m.	3.0
	3.5
	4.0
	4.5
	5.0

Graphic Log: Kerikeri Volcanic Group (Pvb).

Geology: NO Groundwater Encountered.

Water Level

Sensitivity

Corrected Shear Vane Strength (kPa): 202 202 202 202 202 202 202 202

Dynamic Cone Penetrometer (blows/100mm drop): 0 1

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

UTP - Unable to Penetrate
DCP- Dynamic Cone Penetrometer
EOBH - End of Borehole
EODCP - End of DCP

Notes - AL & LS sampled @ 2.50m.

Average Scala Blows	0.0
Average Soil Sensitivity	0.0

FAR NORTH DISTRICT COUNCIL

FAR NORTH OPERATIVE DISTRICT PLAN

APPLICATION UNDER SECTION 139 RESOURCE MANAGEMENT ACT 1991 FOR

RESOURCE CONSENT

FOR LAND USE ACTIVITY.

APPLICANT: Catherine Hanneke van Vliet and Thomas Jay van Vliet
6 Hirere Road
Kerikeri

Subject Site Details

Zone: RURAL PRODUCTION

Address: Tanekaha Lane

Legal Description: Lot 2 DP197024

Certificate of Title: NA124C/881

Area of Site : 1.0787 Ha

Description of Proposed Activity

To use the land to build in an over sized Minor dwelling (80m2) being 33m from permitted larger dwelling.

LAND USE CONSENTS

The responsibility of Northland Regional Council for land use consents is generally restricted to the physical effects of activities (such as earth moving) which can affect water quality and soil. The Far North District Council deals with all other effects of land uses, including effects on adjoining sites. Generally speaking, an activity will require a land use consent unless it is an existing activity, a permitted activity or a designation in this Plan.
The rules which apply to activities for which a land use consent is sought are set out in ***Part 2 -***

Environment Provisions (***Chapters 7-11***), and ***Part 3 - District Wide Provisions*** (***Chapters 12-18***) The rules in ***Part 2*** are different in each zone. It is necessary to look at the particular zone to find the rules which apply to any activity.

CLASSES OF ACTIVITY

A resource consent application for a controlled activity must be assessed and conditions may be imposed in respect of those matters which the Council has specified and over which it has reserved control in the Plan. A controlled activity application cannot be refused unless it is an application for a subdivision to which s406 applies, and the circumstances described in s106 ands406 of the Act exist

INFORMATION REQUIRED

A resource consent application must include adequate supporting information, in the form of written material and plans. The level of detail and scope of the information must be appropriate to the particular application and must be sufficient to enable those who might wish to make a submission on the application to be able to assess its likely effects on the environment.

4.3.1.1 WRITTEN DETAILS

All resource consent applications must be accompanied by an Assessment of Environmental Effects. For controlled and restricted discretionary activities, the assessment of environmental

effects need only address those matters specified in the plan over which the Council has restricted its discretion. Any assessment of environmental effects should be of sufficient detail appropriate to the scale and significance of the actual or potential effects that the activity may have on the environment and must be prepared in accordance with the Fourth Schedule of the Act.

In complying with the above requirement, some or all of the following information at a detail sufficient for the nature and scale of the proposed application may be required to be submitted with any application for resource consent:

(a) **A description of the site including:**

(i) existing uses; Open ground land not used for any specific purpose

(ii) buildings; There are no existing buildings on this site

(iii) topography; sloping 5-8 degrees towards the south (see Donaldson Survey document)

(iv) water bodies ; there are ground water bodies within the easements created in the Title.

(v) existing; there are no existing trees or vegetation to the area to be built upon.

(vi) presence of threatened or rare indigenous flora and fauna; ground coverage of build site is predominately grass

(vii) a brief description of any significant habitats of indigenous fauna (e.g. bush areas); there are no such areas identified on LIM

(viii) natural hazards, including information on the extent and nature of any fill on-site, and any indication of any previous or potential earth movement; The Geotechnical report covers this aspect and buildings have been placed within the designated suggested areas

(ix) soil type, including its suitability for effluent disposal (if proposed); Effluent disposal plan and reports covering effluent and stormwater have been included in submission along with mitigation proposals.

(x) any hazardous substances proposed to be located or used on-site including any past contamination;
None identified in LIM.

(xi) any heritage resources, including known archaeological sites and/or historic buildings and objects;
Not indicated on heritage listings but all due care will be undertaken to report any historical finds

(xii) any physical effect on the locality including any outstanding landscape or natural features as noted in *Appendices 1A* and *1B* of this Plan; Currently site is not being used for any particular specific purpose.

(xiii) a description of the existing and proposed access provision. There is existing access to the site which was approved at the time of subdivision.

(b) A description of the activity for which consent is sought.
Application is sought for the construction of a major dwelling 92m2 floor are and an additional dwelling with 80m2 floor area. This proposal reflects the Governments desire to allow more development on a large property. The engineer has made comment regarding the control of storm water in his geotechnical report.

(c) A statement specifying all other resource consents that the applicant may require from any consent authority in respect of the activity to which the application relates, and whether or not the applicant has applied for such consents.
No other consents have been sought at this stage.

(d) An assessment of any actual or potential effects that the activity may have on the environment and the ways in which those effects may be avoided, remedied or mitigated. This assessment is required by the Fourth Schedule of the Act. In addition to the other matters listed here, the Fourth Schedule requires an identification of those persons interested in or affected by the proposal, the consultation undertaken, any response to the views of those consulted, a description of the mitigation measures proposed, a description of any discharges proposed and the sensitivity of the receiving environment, a description of alternative locations or methods for undertaking the activity, the monitoring which is proposed, and the assessment of any risks to the environment where hazardous substances or installations are proposed.

Consultation with neighbours has not taken place.. The project is in keeping with development within the area of the site. Each of the 2 houses will have in excess of 3,000m2 of outdoor space and then a further There is no intention in subdividing this lot in the future. The effects on surrounding properties is minimal as the any houses are well away and face the other way. There are no hazardous substance on the site and none proposed.

(e) An assessment of the degree to which the activity conforms with the Strategic Drainage Plan and any relevant drainage or stormwater management plan.
Storm water has been discussed within the geotechnical report

(f) Where appropriate, an indication of how electricity and telecommunications are to be provided or, if electricity or telecommunications are not to be provided at present, an indication of where electricity and telecommunication services could be installed should there be a need in the future.
Electrical and Telecommunications are at the ROW side.

(g) A current copy of the Certificate(s) of Title for the subject site(s).
As attached
(h) All other information as required on the resource consent application form.
As attached
(i) Any other information referred to in the relevant rules.
None

(j) Any information required to enable a full assessment of the proposal in terms of the relevant assessment criteria.
All reports attached

(k) An activity which may have significant adverse effects on the environment may need to be accompanied by one or more reports prepared by suitably qualified persons.

Chapter 4 – STANDARD PROVISIONS

(l) Any engineering report submitted with the application shall include a performance statement (a written declaration by a person responsible for an activity/product/process, setting out the performance requirements, how these are to be met and the measures required to assess their effectiveness).
All reports prepared by registered engineers

4.3.1.2 DRAWINGS
In addition to the above information, any application for resource consent shall include a set of drawings illustrating the proposal. Two copies to scale, of each drawing are required, and one copy reduced to A4 size.
The drawings may include the details set out in paragraphs (a), (b), (c) and (d) below, as applicable:

(a) A drawing showing the location of the site, with road name, legal description and north point.
Attached

(b) A site plan of the property drawn to a recognised metric scale appropriate for displaying, where applicable, the following information:
Attached

(i) Site boundary lengths and other dimensions in metres including proposed and partially completed subdivisions where the Certificate of Title has not been issued.
Attached

(ii) location with distances to site boundaries, of all existing buildings, and all proposed buildings and structures (including where applicable, eaves, balconies, courts and verandas) and all impervious surfaces;
Attached

(iii) proposed use of each building;
Attached

(iv) position of any easement over the site;
As per site plan and Certificate of Title

(v) position, location and dimensions of every parking and loading space (headroom dimensions are also required where parking or loading is within or under a building) and the proposed access and manoeuvring areas including the location and width of footpath crossings necessary to serve such a space;
Attached

(vi) kerb lines adjacent to the site and position of any street trees;
Not applicable

(vii) levels on the site boundaries and around any buildings and, except in cases where the site is less than 1000 m² or has a uniform grade of less than 1 in 10, contours of the site at 1m intervals;
As attached

(viii) proposed retaining walls, excavations and landfill (including depths of any proposed cut or fill);
Not applicable

(ix) proposed landscaping (particularly where this is a requirement of the zone rules). Dimensioned areas of the landscaping should be shown together with all existing and proposed sealed areas, a list of species and planting plan;
Not applicable as area around dwelling to be used as grassed areas

(x) where relevant, appropriate shadow diagrams or models showing overshadowing envelopes on adjacent properties;
Not applicable as the size and locations are in excess of 10m from boundaries

(xi) waterbodies (including the coastal marine area) and drainage and sewer pipes within

and adjacent to the site;
Not applicable see wastewater engineering report

(xii) the means proposed to deal with all stormwater and sanitary drainage;
As per engineering report attached

(xiii) location and extent of existing uses;
Shown on site plans

(xiv) location of existing vegetation and any proposed changes to vegetation (e.g. clearance, tree planting);
not applicable

(xv) location of any indigenous vegetation and habitats of indigenous fauna (e.g. bush areas, wetlands and streams);
None as the land was covered in grass

(xvi) extent and nature of natural hazards including any fill on-site, and any previous or potential earth movement;
In attached geotechnical report

(xvii) location of soil types if these differ across the site;
In attached geotechnical report

(xviii) location and extent of any hazardous substances or any past contamination;
Not applicable

(xix) location and extent of any heritage resources (as listed in *Appendices 1D, 1E, 1F* and *1G* in *Part 4)*, including known archaeological sites. If the site contains any notable trees listed in *Appendix 1D*, the extent of the natural dripline shall be shown, together with the trunk diameter and the height of the tree in metres. Any notable tree located on adjacent land, where the dripline extends onto the site, shall also be indicated on the drawing;
none.

(**xx) location and extent of any landscape features or natural features as listed in *Appendices 1A* and *1B* in *Part 4*;**
None
(xxi) location of ridgelines;
Location is down slope of Tanekaha Lane and not anywhere near ridge lines

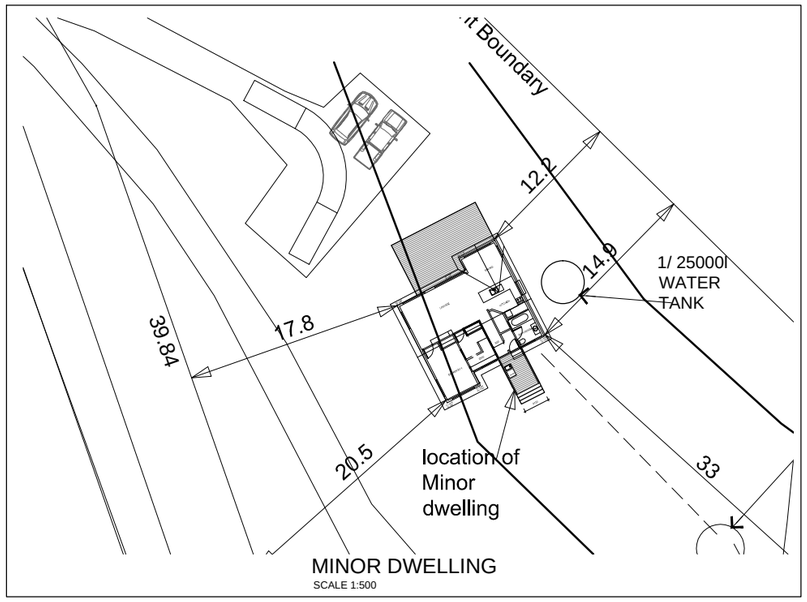
(**xxii) the location of the existing and future access provisions.**
As shown on site plans

Chapter 4 - STANDARD PROVISIONS

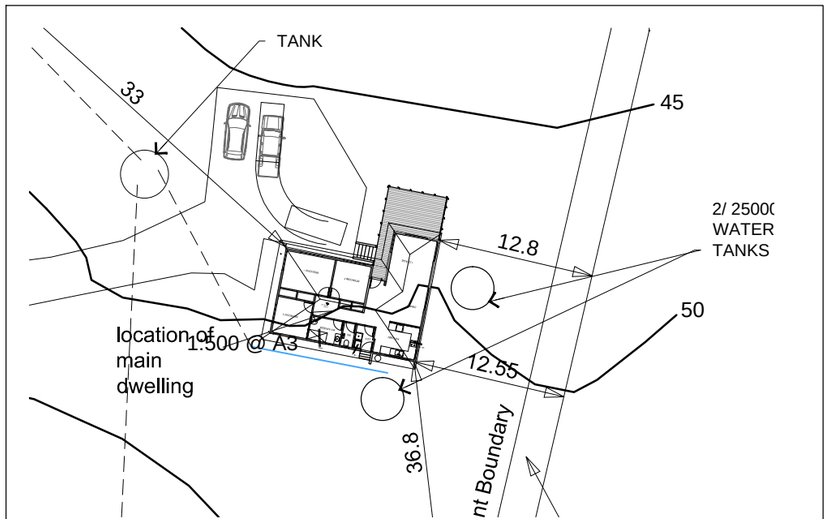
(b) A floor plan of each building (at a scale of not less than 1:100) showing:

(i) use of all parts of the building, including basements, parking, lift towers, storage or service areas;
(ii) room layout of the building, if this is known, and a clear identification of the use of different rooms or parts of a floor.
Where several floors are of the same area and use, a standard floor plan may be shown.
(d) Elevations of each building (at a scale not less than 1:100) showing:
(i) external appearance of the building including doors and windows and materials to be used;
(ii) number of floors and their proposed usage;
(iii) building heights and height in relation to any boundary;
(iv) relative height of new buildings fixed in terms of a datum;
(v) maximum permitted height marked;
(vi) additional height requested;
(vii) original ground levels along boundaries at 1m intervals in relation to the datum used.
(e) Any other information referred to in the relevant rules.
(f) Any information required to enable a full assessment of the proposal in terms of the relevant assessment criteria.

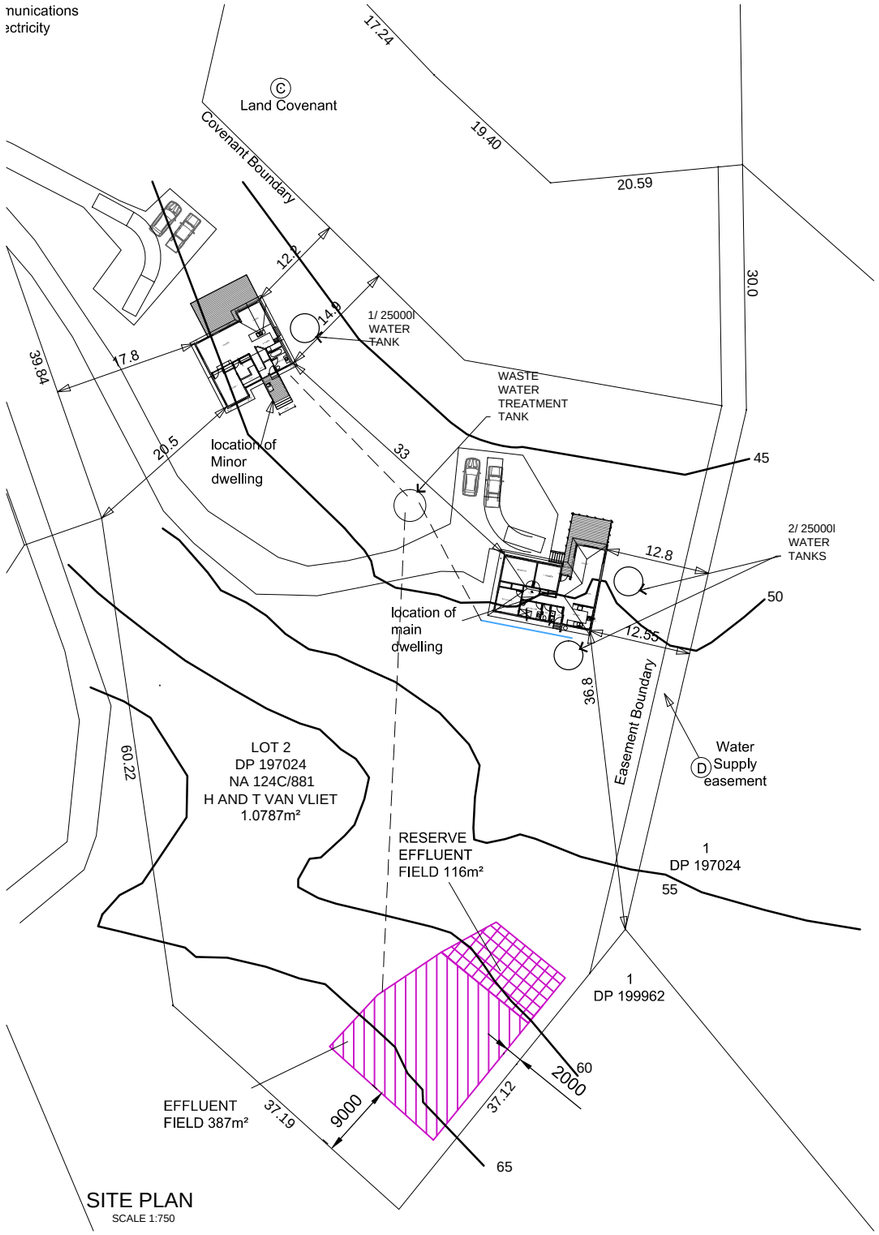
As attached



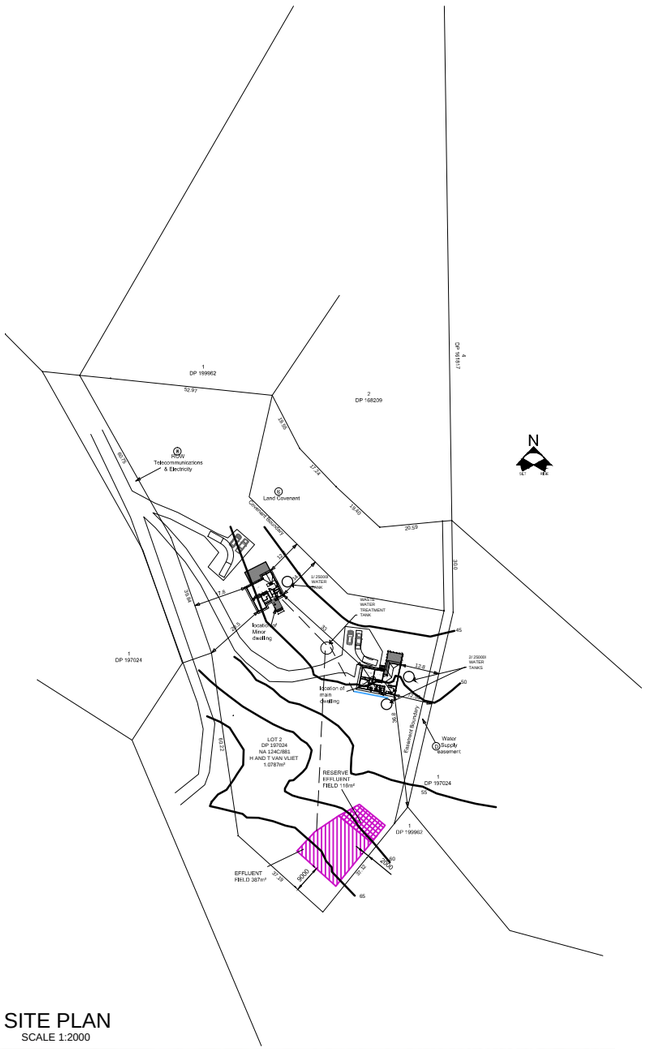
MINOR DWELLING
SCALE 1:500



MAIN HOUSE
SCALE 1:500



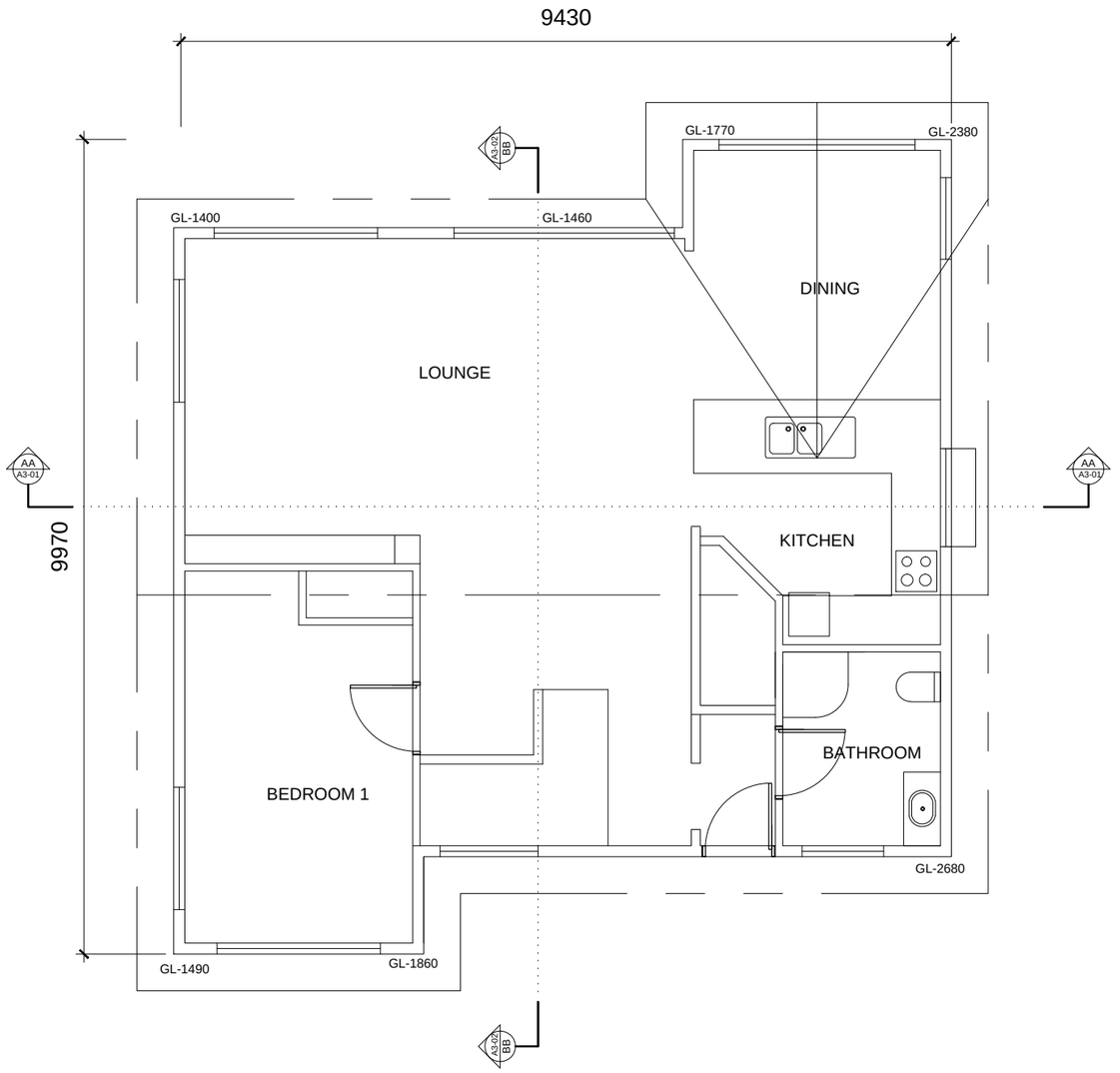
SITE PLAN
SCALE 1:750



SITE PLAN
SCALE 1:2000

DRONE PHOTO

LIVING ARCHITECTURE Mobile 027 285 5605 Email bert.draw@gmail.com	**Sheet Title** SITE PLAN	**Project Title** VAN VLIET RELOCATABLE HOUSE TANEKAHA LANE KAPIRO	**Notes** Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office. This document and the copyright in this document remain the property of Living Architecture Ltd. The contents of this document may not be reproduced either in whole or in part by any means whatsoever without the prior written consent of Living Architecture Ltd.	**Revision** / **By** / **Date** **Designed** BVV 07-25 **Drawn** BVV 07-25 **Reviewed** **Approved**	**CAD Ref** 100982 **Project No** 100982	**Scale (A3 Original)** 1:2000 @ A3 **Sheet** / **Revision** A0-01 / A



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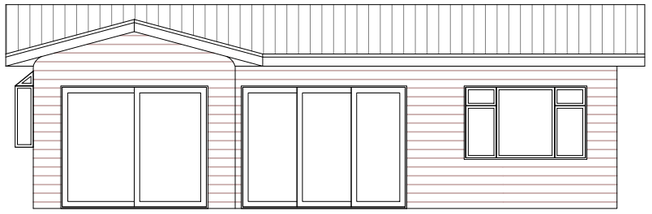
Sheet Title
EXISTING PLAN
MINOR DWELLING

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
WAIPAPA

Notes
Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office.

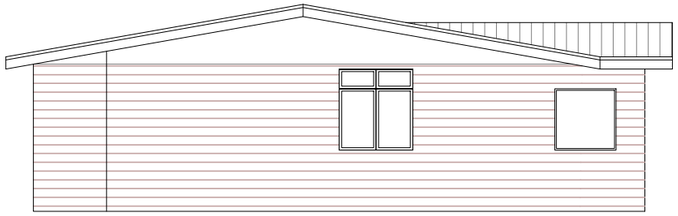
Revision	By	Date
Designed	BVV	05-25
Drawn	BVV	05-25
Reviewed		
Approved		

CAD Ref	Scale (A3 Original)	
100982	1:75 @ A3	
Project No	**Sheet**	**Revision**
100982	A1-01	A



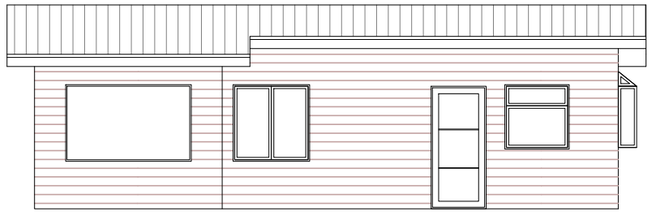
ELEVATION A

RISK MATRIX ASSESSMENT					
Risk Factor:	Low	Medium	High	Very High	Score
A. Wind Zone	0	0	1	2	1
B. Number of Storeys	0	1	2	4	0
C. Roof / Wall Intersection Design	0	1	3	5	0
D. Eave Width	0	1	2	5	1
E. Envelope Complexity	0	1	3	6	0
F. Deck Design	0	2	4	6	0
					2
Cladding Types: EXISTING TIMBER WEATHERBOARD CLADDING DIRECT FIXED					



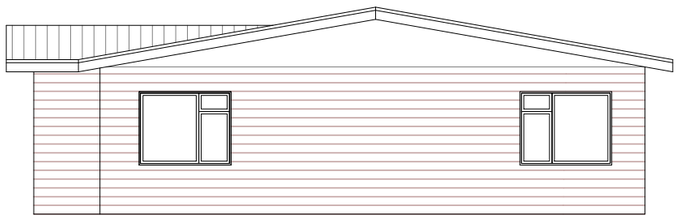
ELEVATION B

RISK MATRIX ASSESSMENT					
Risk Factor:	Low	Medium	High	Very High	Score
A. Wind Zone	0	0	1	2	1
B. Number of Storeys	0	1	2	4	0
C. Roof / Wall Intersection Design	0	1	3	5	0
D. Eave Width	0	1	2	5	1
E. Envelope Complexity	0	1	3	6	0
F. Deck Design	0	2	4	6	0
					2
Cladding Types: EXISTING TIMBER WEATHERBOARD CLADDING DIRECT FIXED					



ELEVATION C

RISK MATRIX ASSESSMENT					
Risk Factor:	Low	Medium	High	Very High	Score
A. Wind Zone	0	0	1	2	1
B. Number of Storeys	0	1	2	4	0
C. Roof / Wall Intersection Design	0	1	3	5	0
D. Eave Width	0	1	2	5	1
E. Envelope Complexity	0	1	3	6	0
F. Deck Design	0	2	4	6	0
					2
Cladding Types: EXISTING TIMBER WEATHERBOARD CLADDING DIRECT FIXED					



ELEVATION D

RISK MATRIX ASSESSMENT					
Risk Factor:	Low	Medium	High	Very High	Score
A. Wind Zone	0	0	1	2	1
B. Number of Storeys	0	1	2	4	0
C. Roof / Wall Intersection Design	0	1	3	5	0
D. Eave Width	0	1	2	5	1
E. Envelope Complexity	0	1	3	6	0
F. Deck Design	0	2	4	6	0
					2
Cladding Types: EXISTING TIMBER WEATHERBOARD CLADDING DIRECT FIXED					

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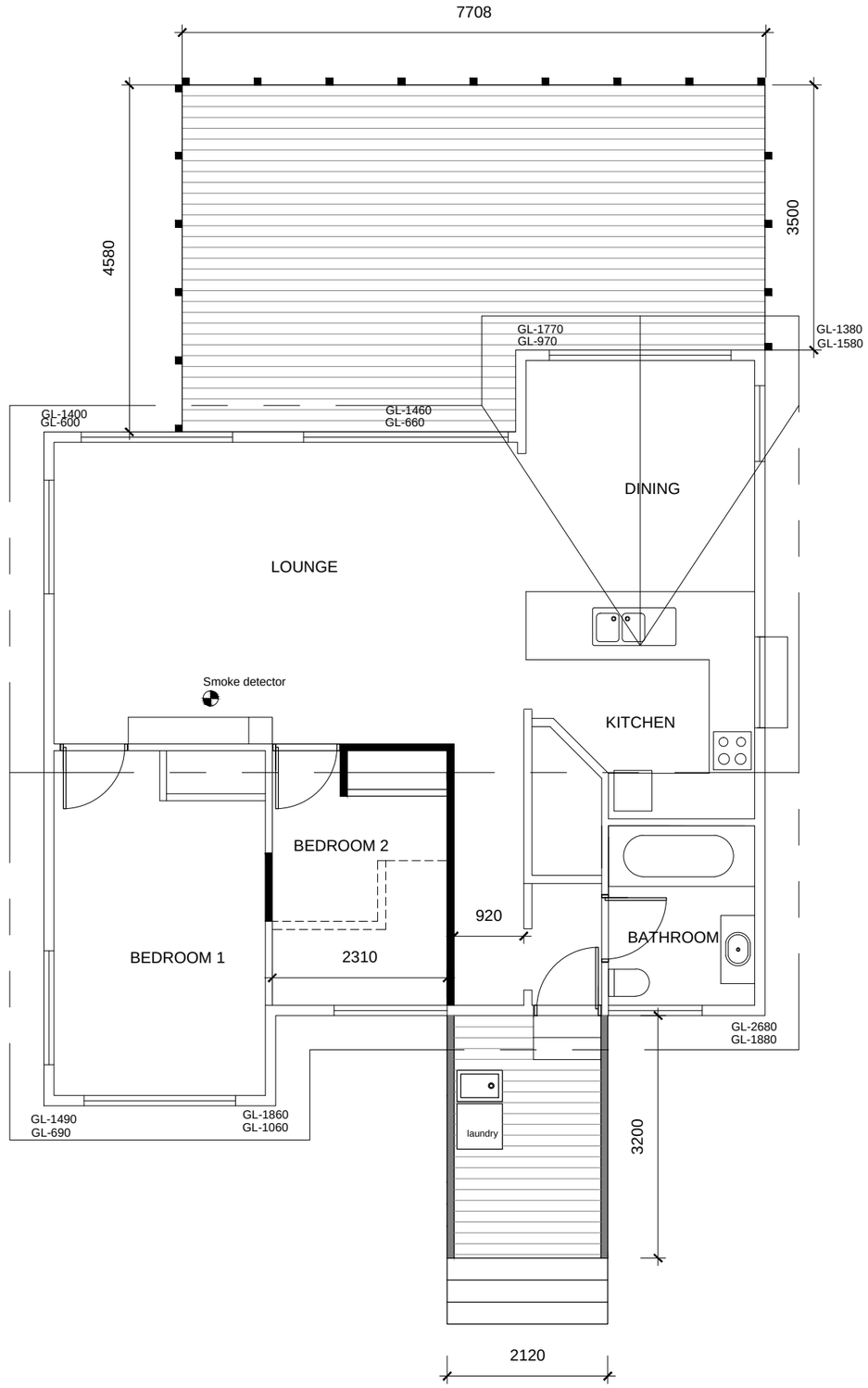
Sheet Title
ELEVATIONS
MINOR DWELLING

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
WAIPAPA

Notes
Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office.

Revision	By	Date
Designed	BVV	05-25
Drawn	BVV	05-25
Reviewed		
Approved		

CAD Ref	Scale (A3 Original)
100982	1:75 @ A3
Project No	Sheet / Revision
100982	A1-02 / A



LIVING ARCHITECTURE
P.O. Box 352, Kerikeri
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Sheet Title
PROPOSED PLAN
MINOR DWELLING

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
WAIPAPA

Notes
Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office.

Revision	By	Date
Designed	BVV	05-25
Drawn	BVV	05-25
Reviewed		
Approved		

CAD Ref	Scale (A3 Original)	
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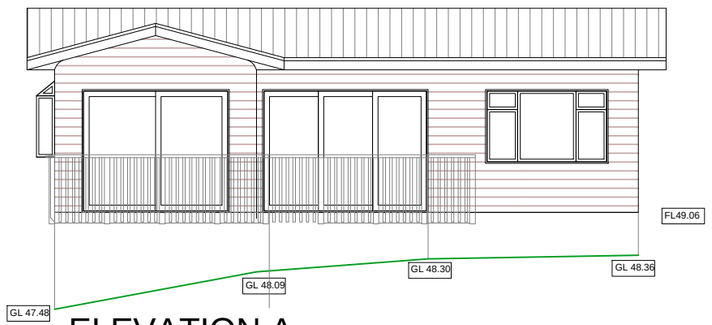
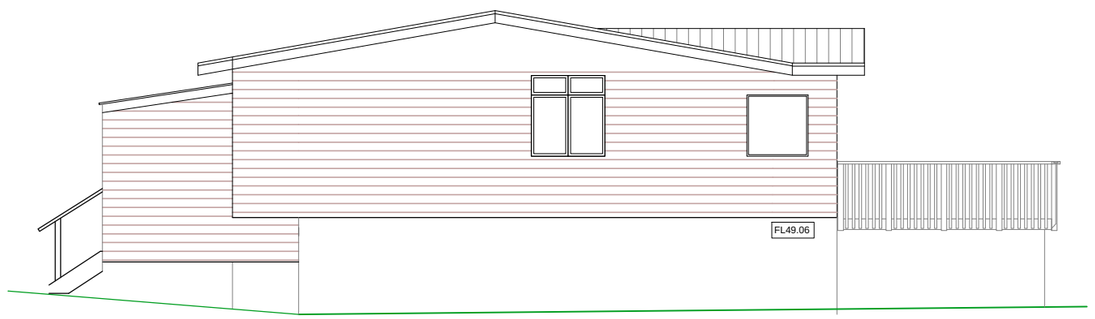
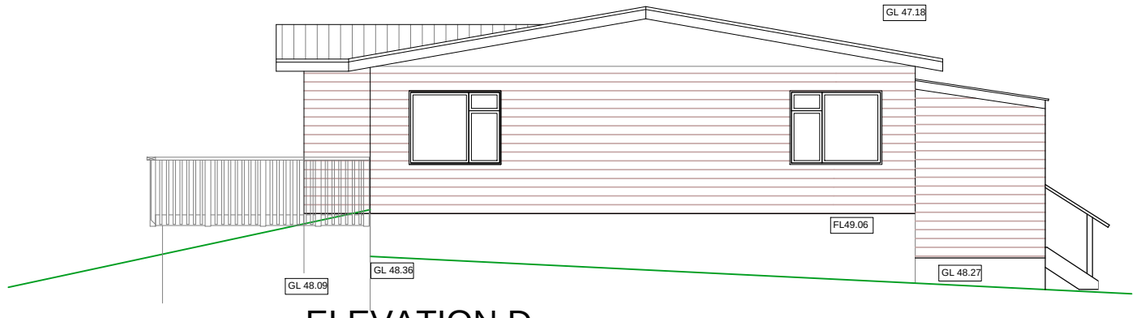


ELEVATION A



ELEVATION B

ELEVATION C



ELEVATION D

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Sheet Title
PROPOSED ELEVATIONS
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VAN VLIET
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TANEKAHA LANE
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Notes
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Revision	By	Date
Designed	BVV	05-25
Drawn	BVV	05-25
Reviewed		
Approved		

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Project No	**Sheet** / **Revision**
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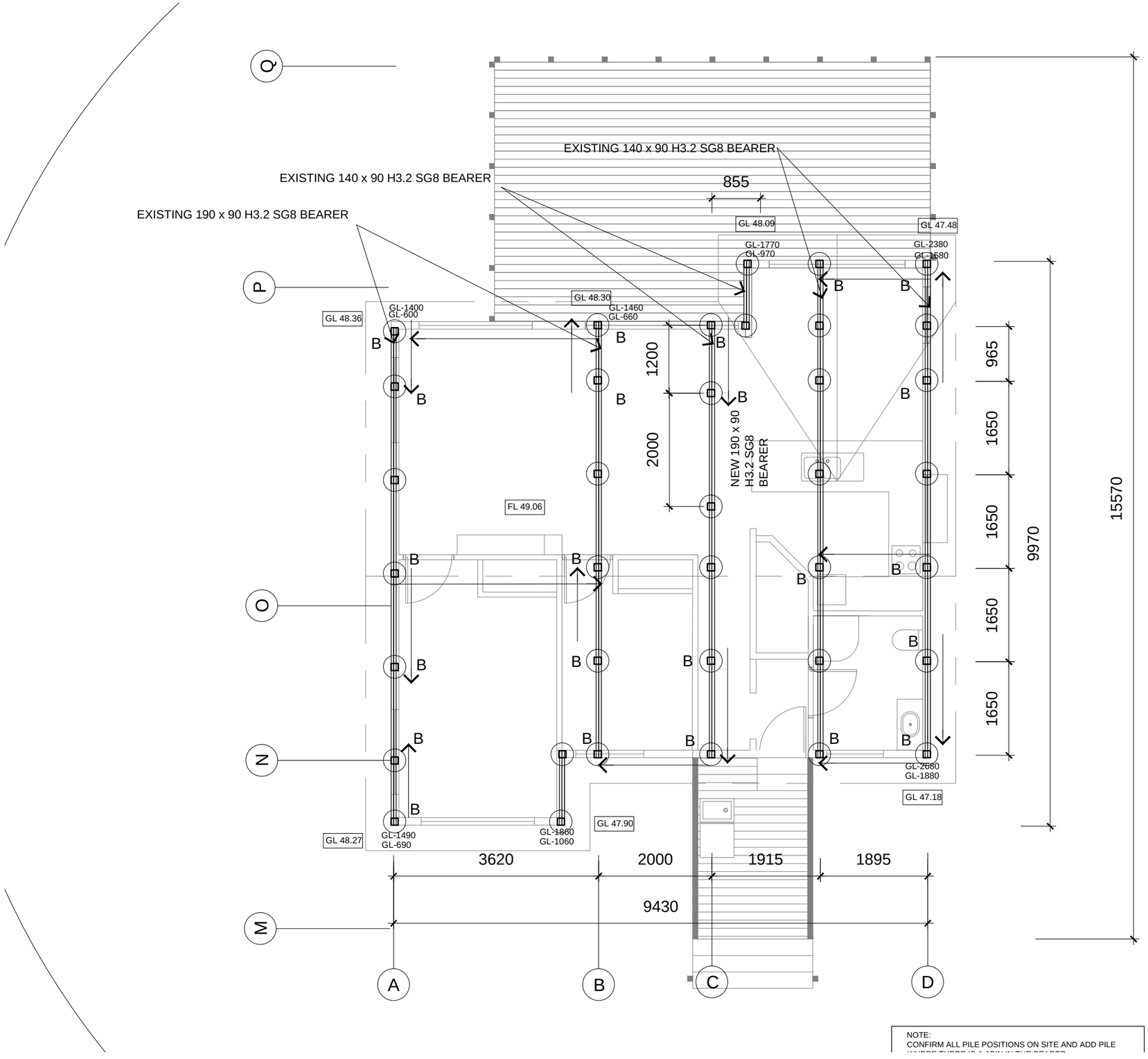

NOTE:
CONFIRM ALL PILE POSITIONS ON SITE AND ADD PILE

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SUBFLOOR PLAN
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VAN VLIET
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TANEKAHA LANE
WAIPAPA

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Project No	Sheet	Revision
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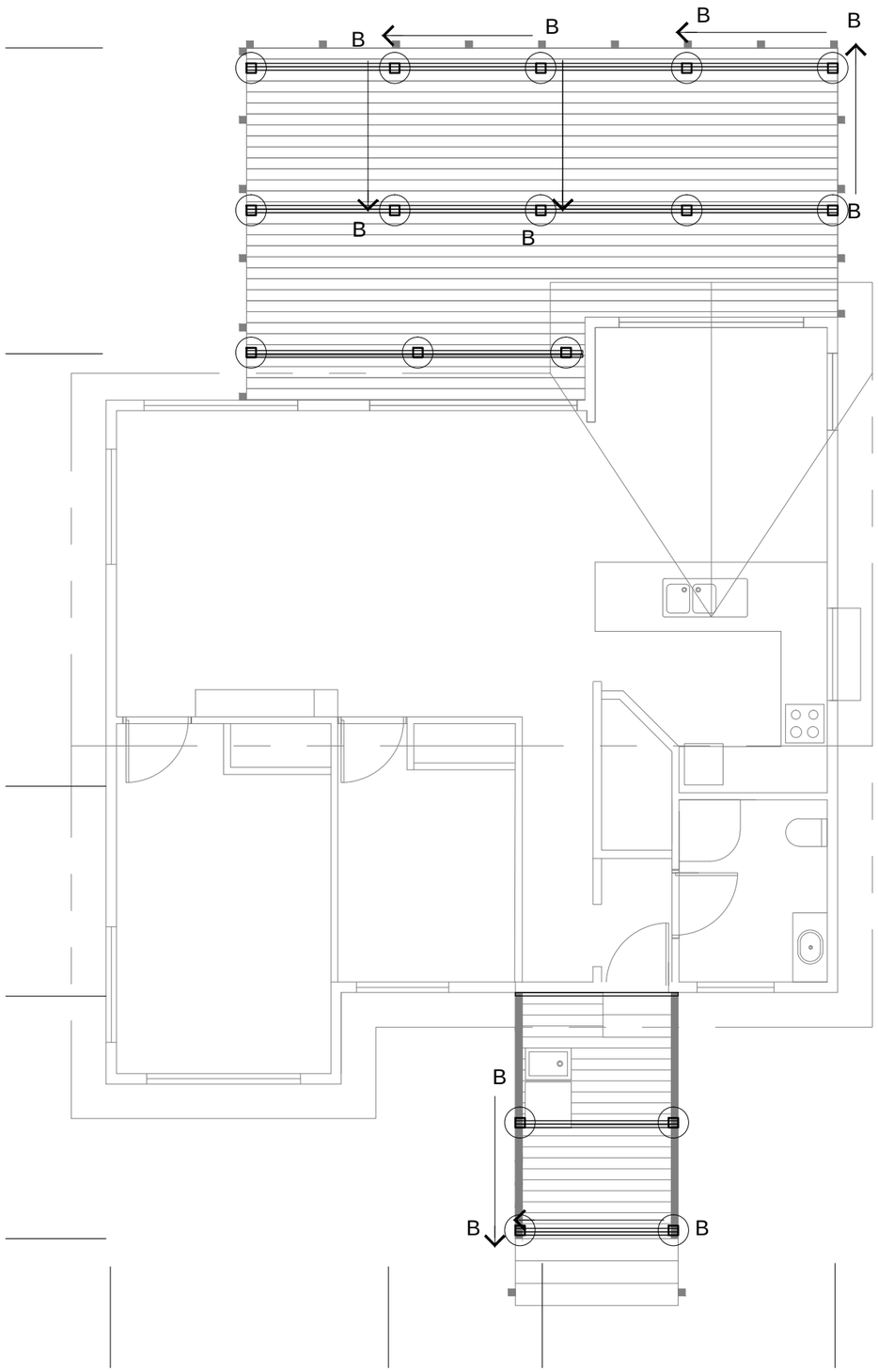

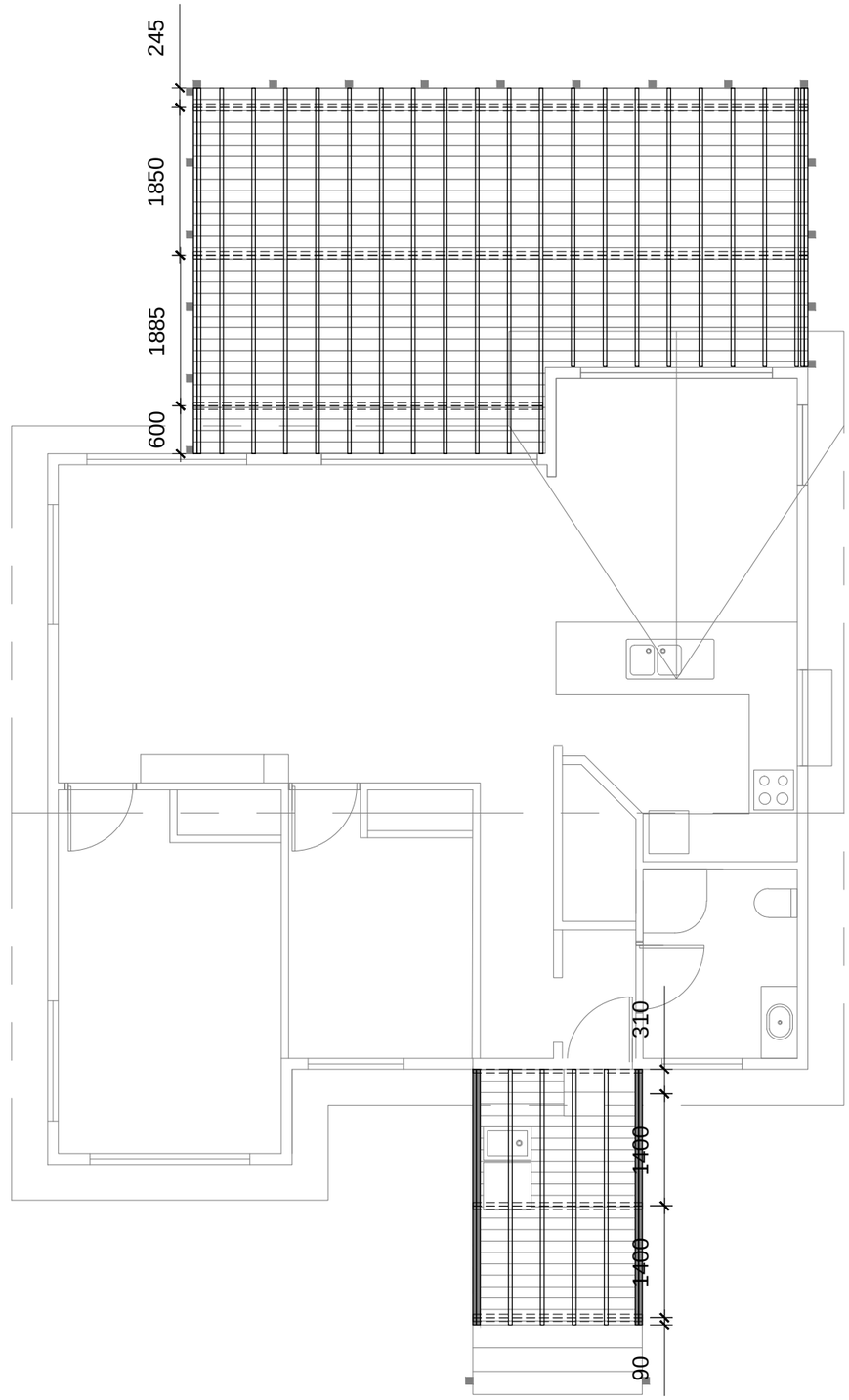

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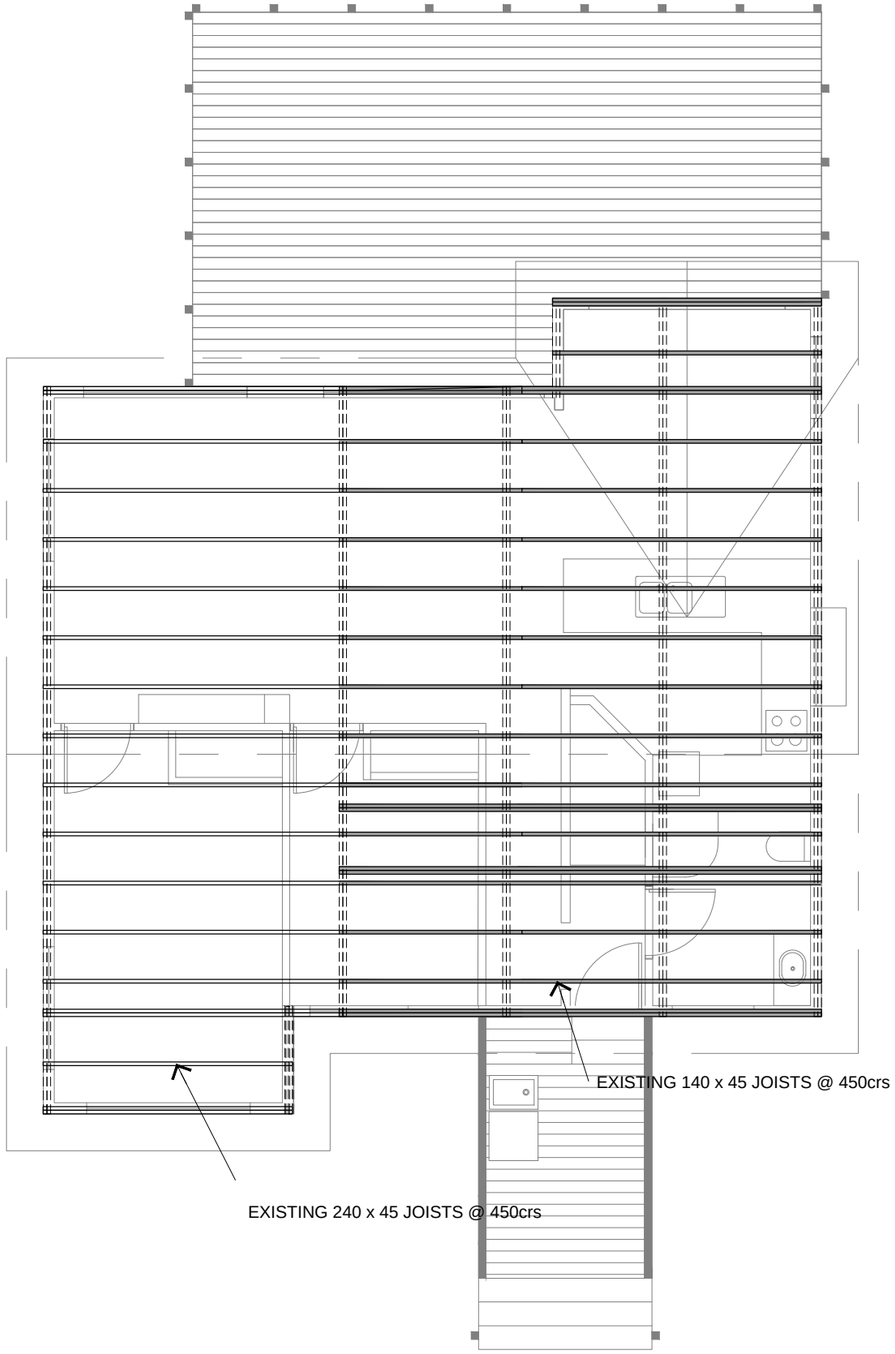

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JOIST LAYOUT PLAN
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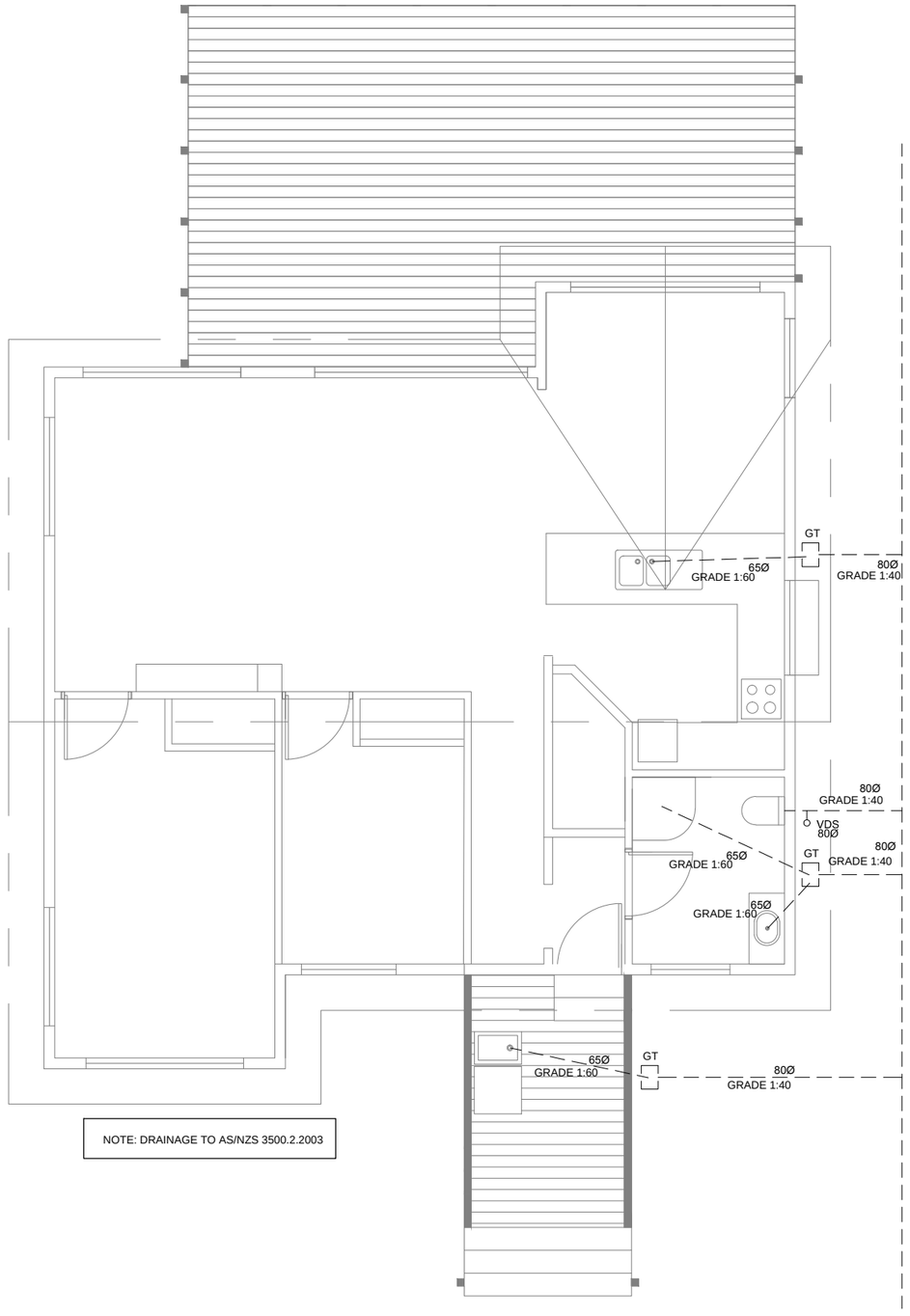

Waste Pipe Gradients (min)		
40Ø	1:40 Minimum Gradiant	4DU
65Ø	1:40 Minimum Gradiant	21DU
100Ø	1:60 Minimum Gradiant	115DU
Waste Pipe & Discharge Units		
40Ø	Hand basin	1DU
40Ø	Kitchen Sink	3DU
40Ø	Dishwasher	3DU
40Ø	Laundry Tub	3DU
40Ø	Washing Machine	5DU
40Ø	Shower	2DU
40Ø	Bath	4DU
100Ø	WC Pan	4DU
Drainage Pipe Gradient		
65Ø	1:40 Minimum Gradiant	25DU
85Ø	1:60 Minimum Gradiant	61DU
100Ø	1:60 Minimum Gradiant	205DU
150Ø	1:60 Minimum Gradiant	1310DU

Plumbing Legend	
● VDS	Vent Discharge Stack
• DS	Discharge Stack
▩	Air Admittance Valve
+I	Inspection Joint
————	Drainage - Waste Pipe
————	Vent Pipe
GT	Gulley Trap

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DRAINAGE PLAN
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RELOCATABLE HOUSE
TANEKAHA LANE
WAIPAPA

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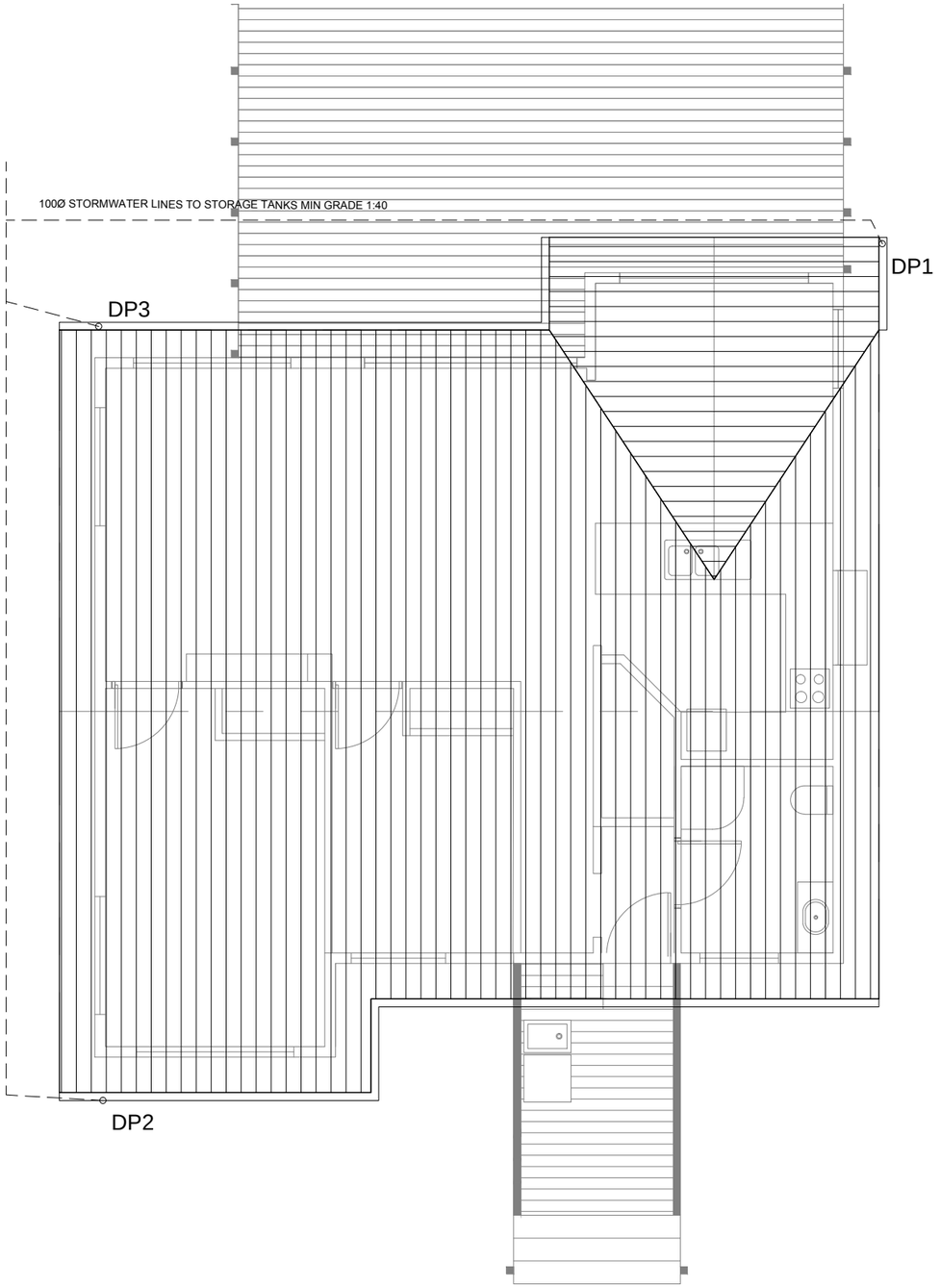

Roof

Fall 15°

Storm water calculations:

Roof Gutter type- 100 Customline gutter
Cross-sectional Area - 6000 mm²
Roof Area serviceable;- 50m²
Ref E1/AS1 Table 5

Roof Area A= 12 m²
Downpipe size = **1** x A1 Downpipes 80Ø
Ref E1/AS1 Table 5

Rainfall Intensity= 115mm/hr
Ref E1/AS1 Appendix A

Roof

Fall 10°

Storm water calculations:

Roof Gutter type- 100 Customline gutter
Cross-sectional Area - 6000 mm²
Roof Area serviceable;- 50m²
Ref E1/AS1 Table 5

Roof Area A= 86 m²
Downpipe size = **2** x A1 Downpipes 80Ø
Ref E1/AS1 Table 5

Rainfall Intensity= 115mm/hr
Ref E1/AS1 Appendix A

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Sheet Title
ROOF PLAN
MINOR DWELLING

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RELOCATABLE HOUSE
TANEKAHA LANE
WAIPAPA

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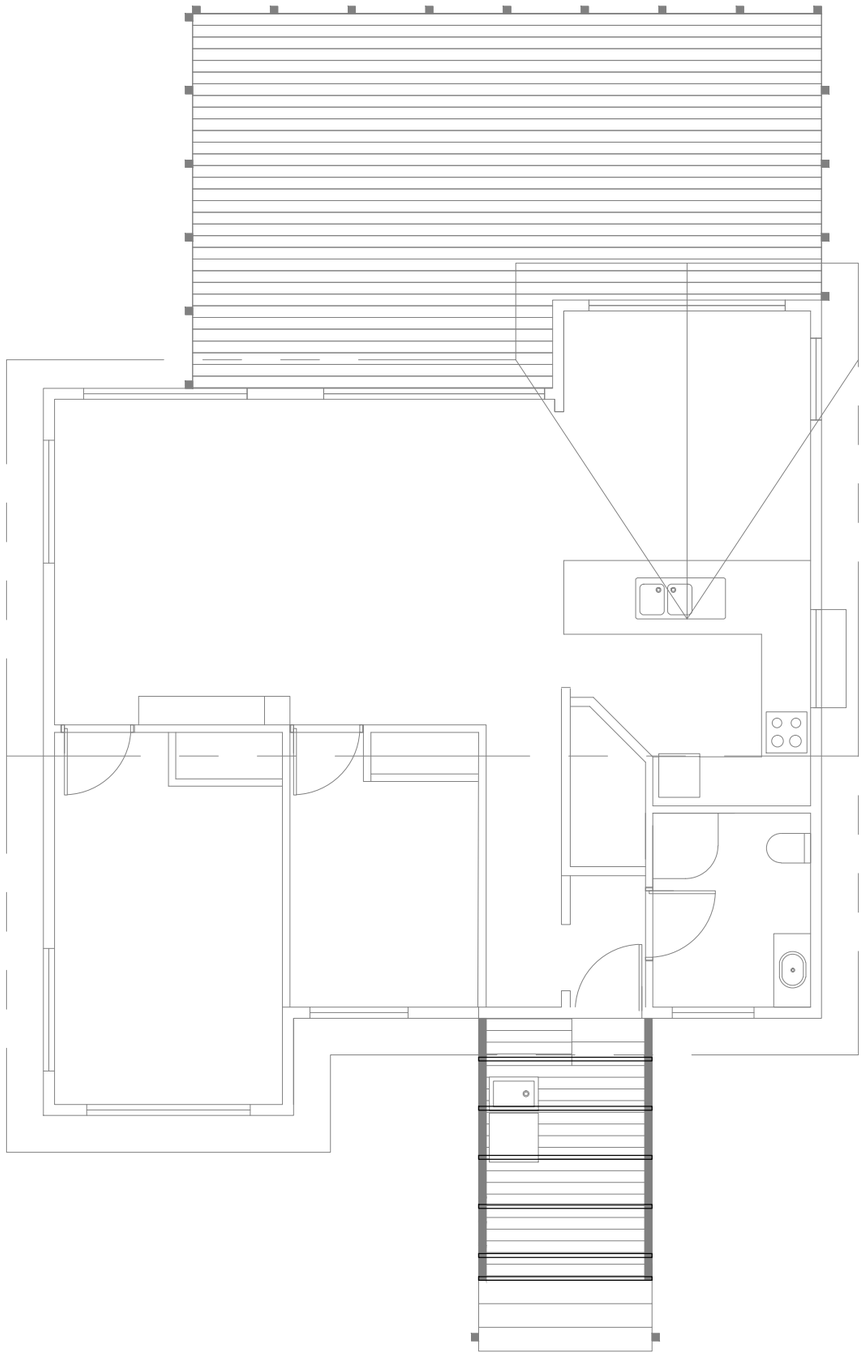

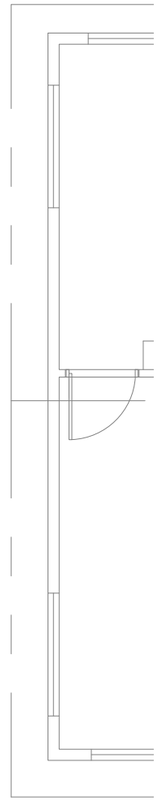

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PERGOLA ROOF PLAN
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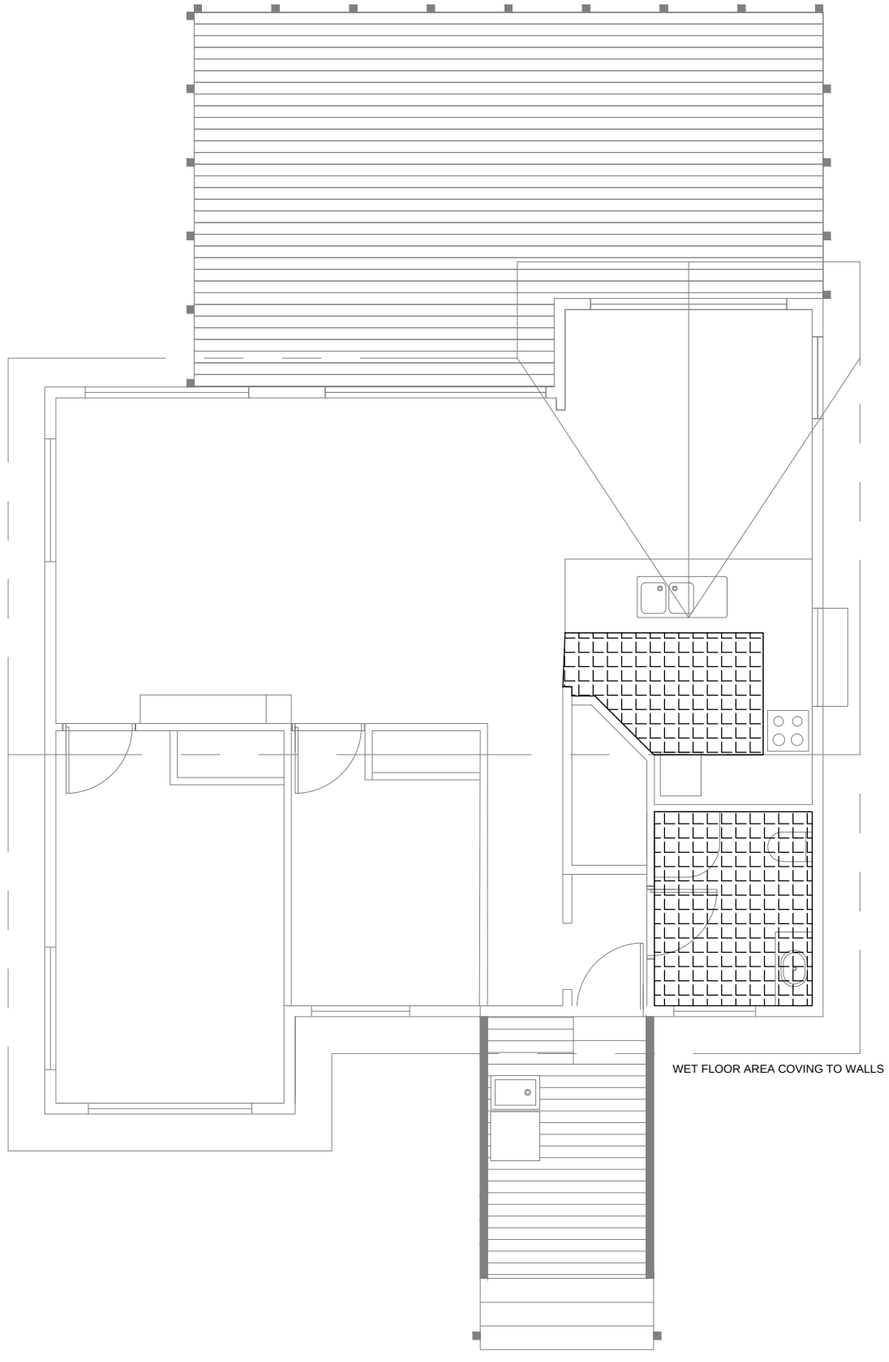

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WET FLOOR AREAS
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TANEKAHA LANE
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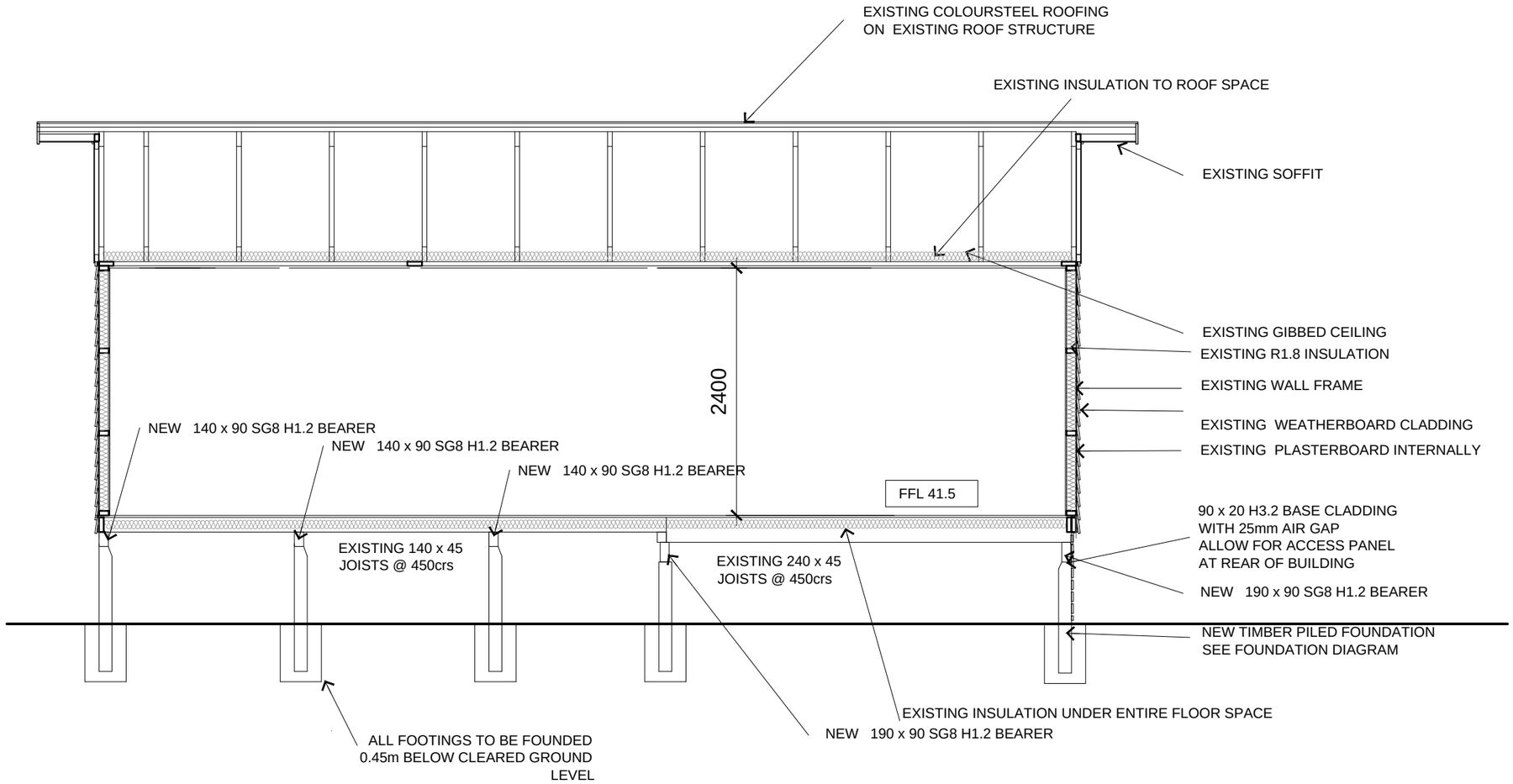

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Sheet Title
SECTION AA
MINOR DWELLING

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RELOCATABLE HOUSE
TANEKAHA LANE
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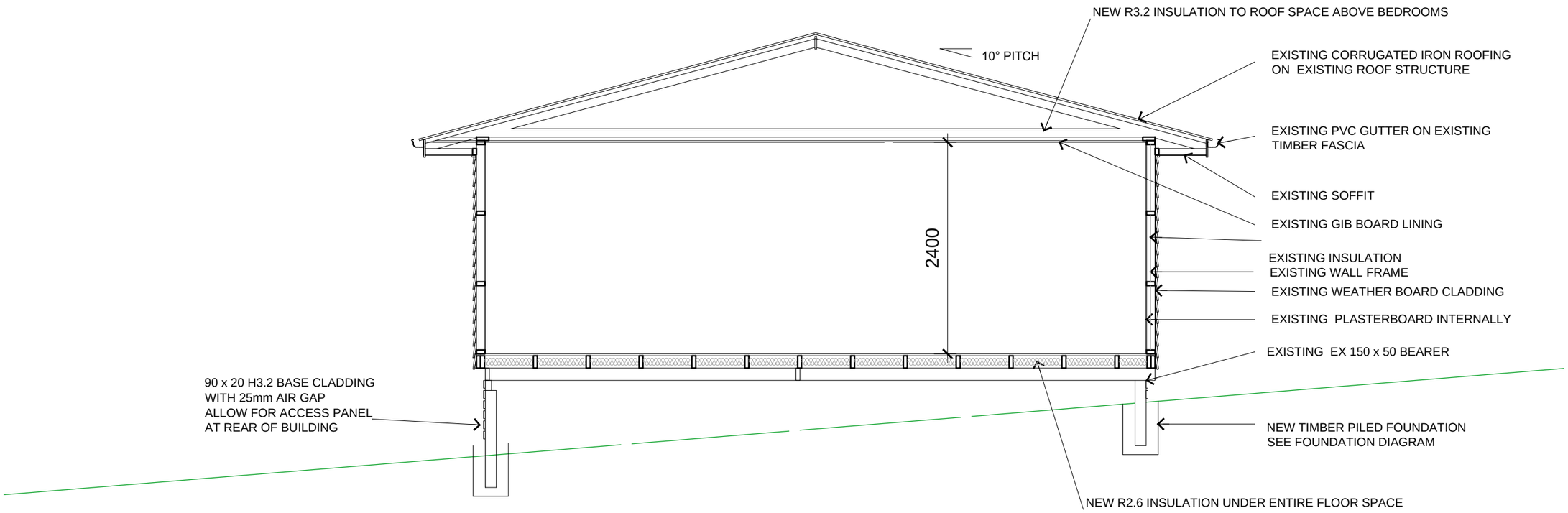

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Sheet Title
SECTION BB
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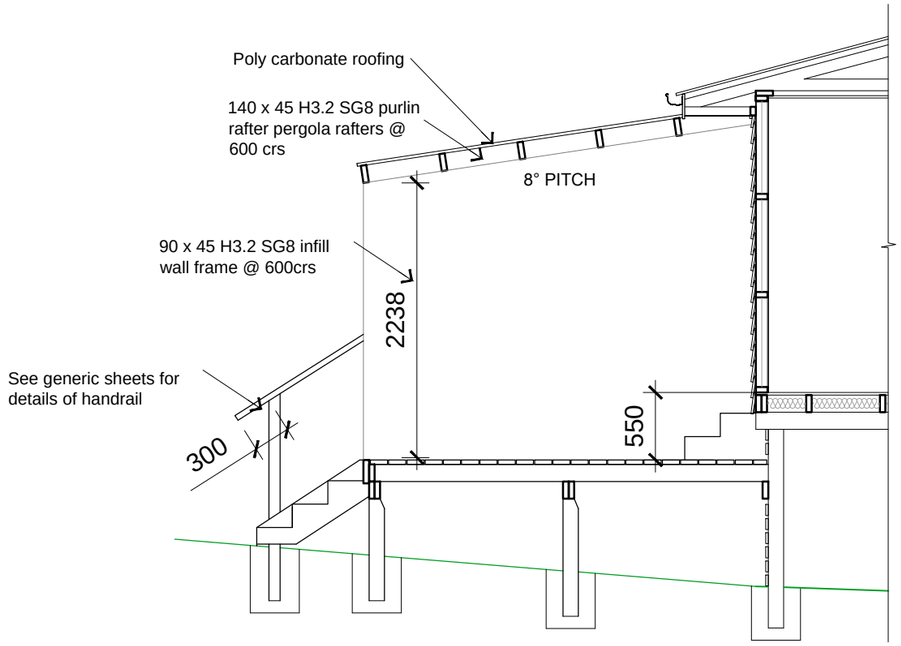
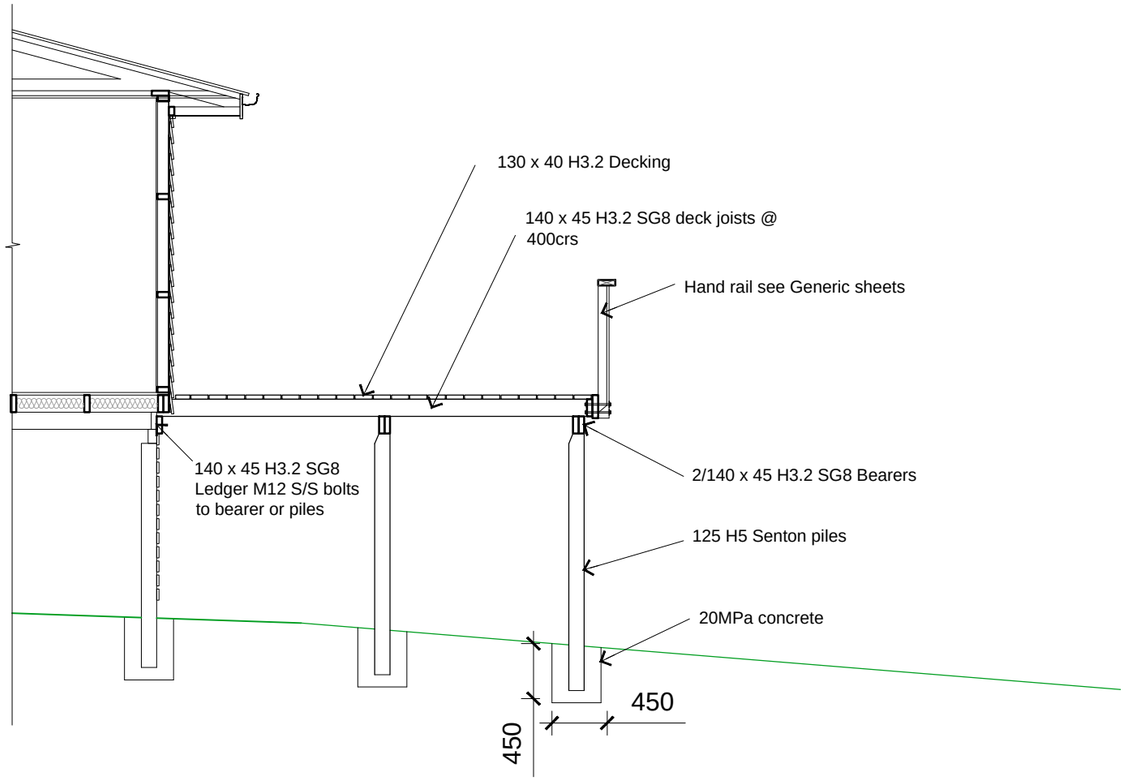
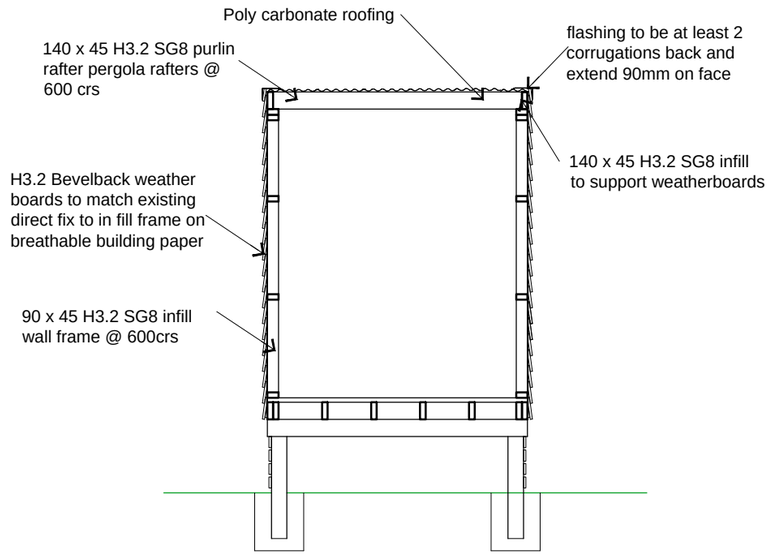


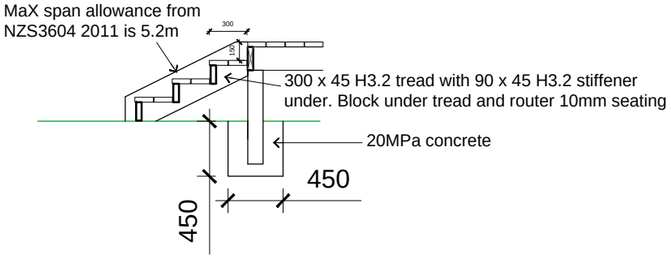
Note: Sub floor similar to detail RHS





Note: Sub floor similar to detail RHS

290 x 45 H3.2 SG8 stair ledger, 2 M12 to each post
SS connections with square washers each side
MaX span allowance from NZS3604 2011 is 5.2m



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Sheet Title
PROPOSED SECTION BB
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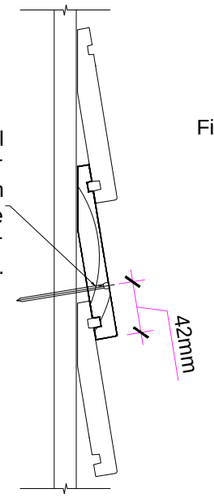

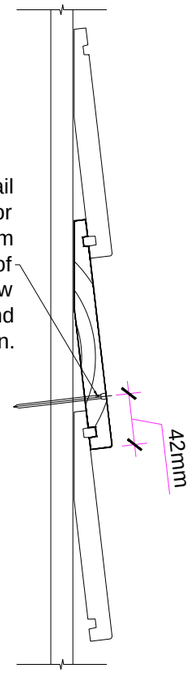

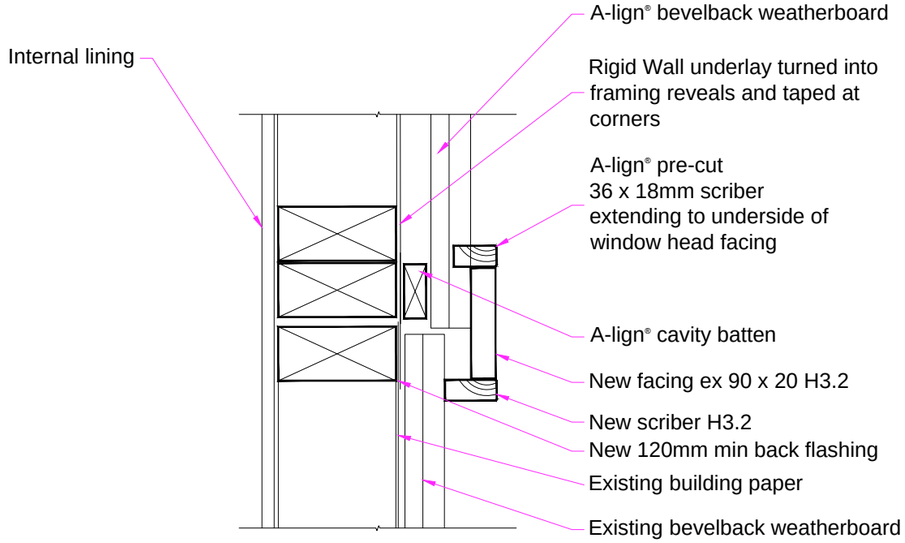

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Sheet Title
CLADDING TO OUTDOOR LAUNDRY

MINOR DWELLING

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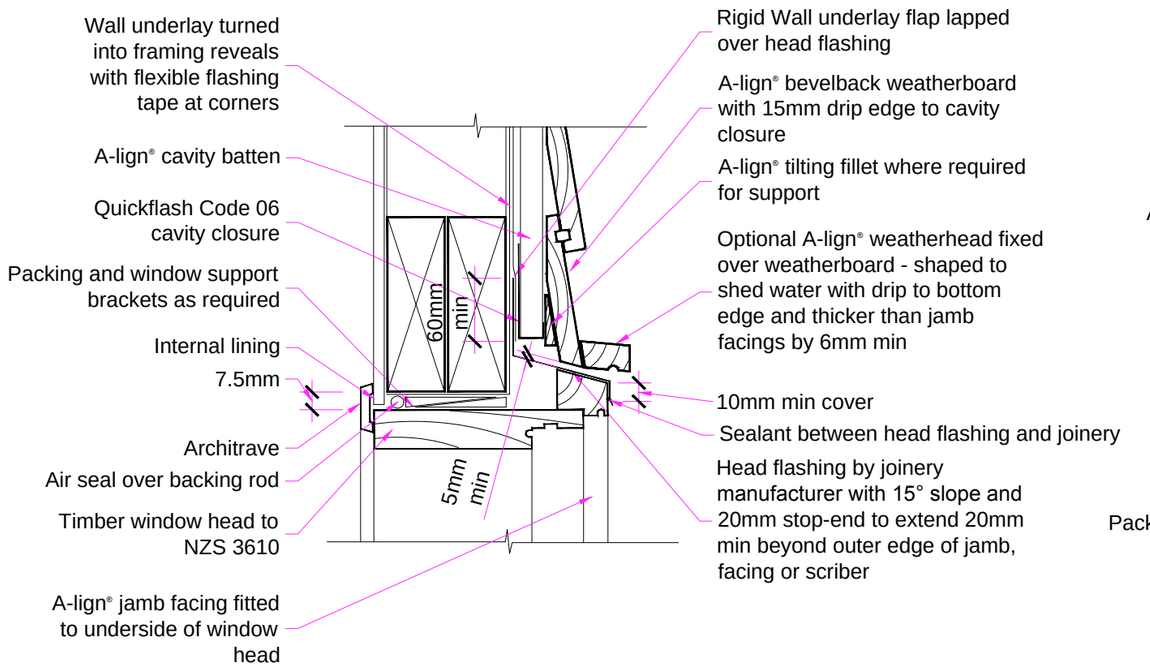

Figure 2.14 A-lign® bevelback weatherboard - cavity - timber window head

Scale 1:5

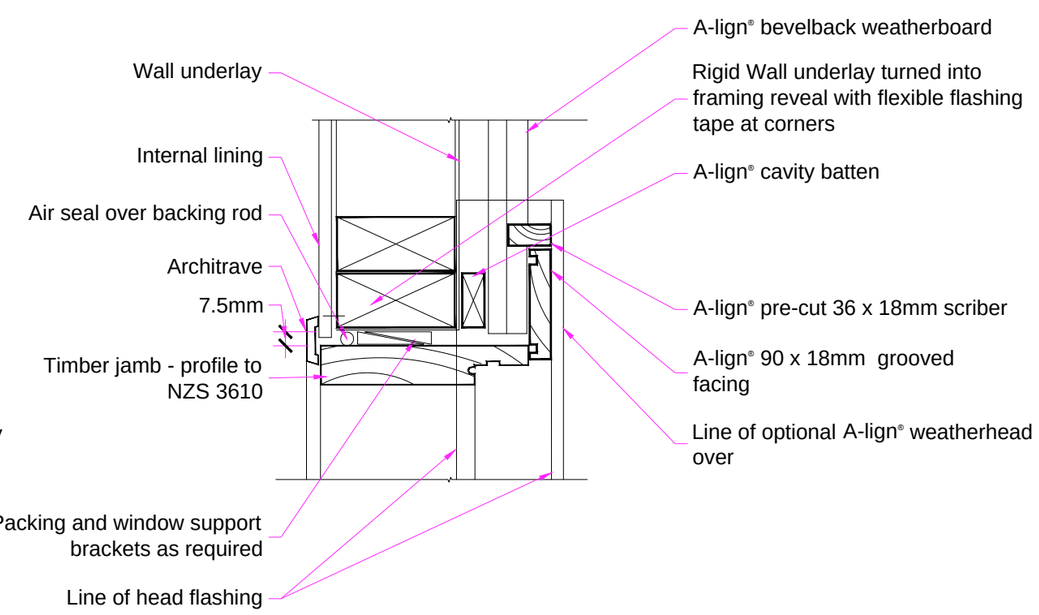

Figure 2.15 A-lign® bevelback weatherboard - cavity - timber window jamb

Scale 1:5

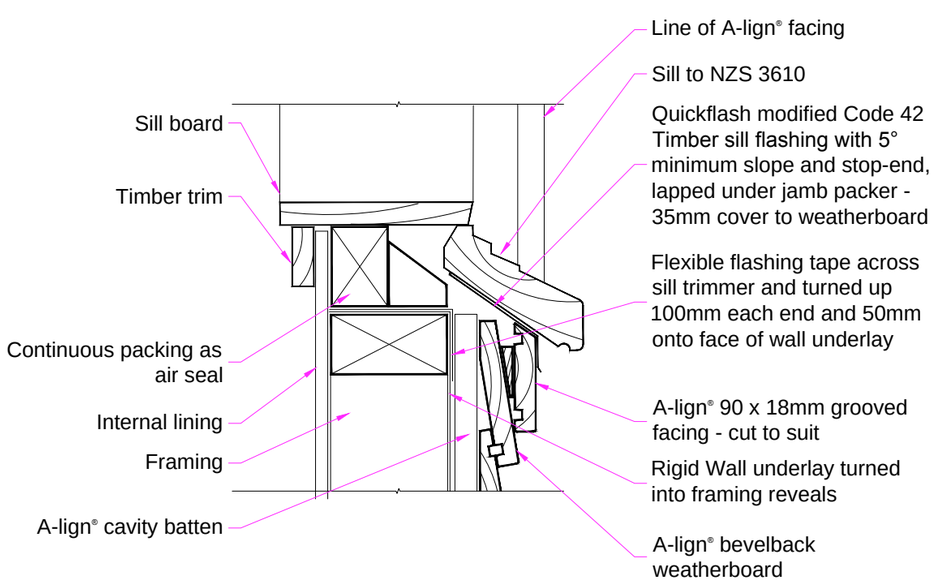

Figure 2.16 A-lign® bevelback weatherboard - cavity - timber window sill

Scale 1:5

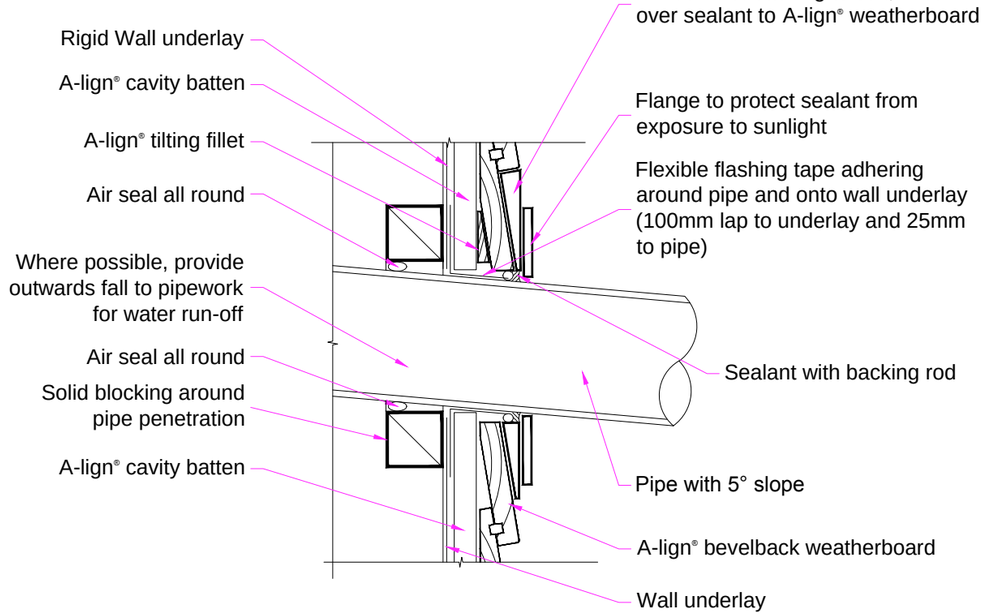

Figure 2.30 A-lign® bevelback weatherboard - cavity - pipe penetration

Scale 1:5

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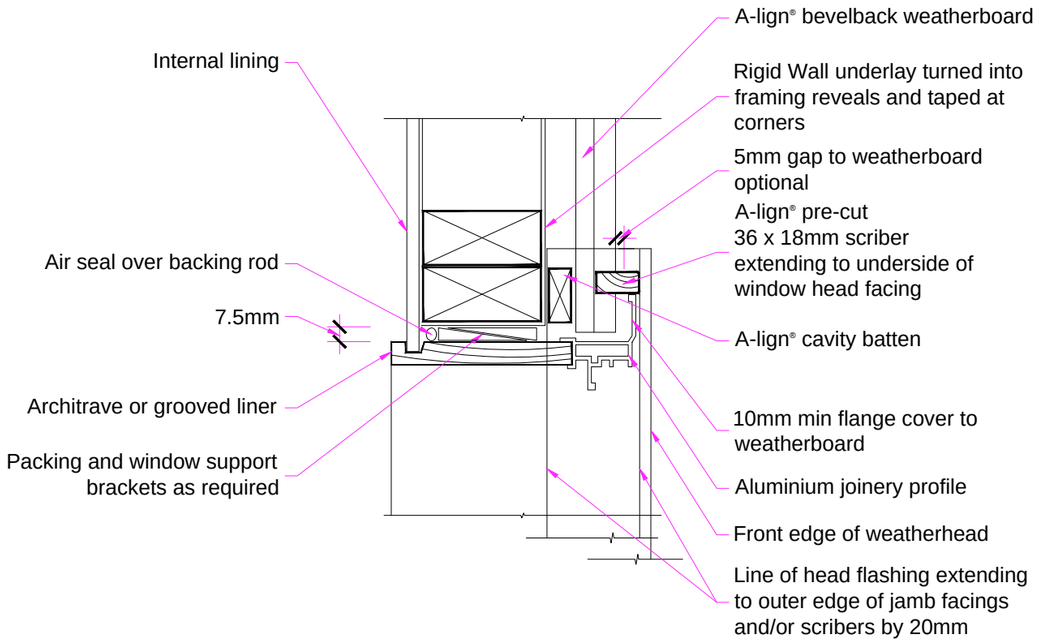

Figure 2.12 A-lign® bevelback weatherboard - cavity - aluminium window jamb

Scale 1:5

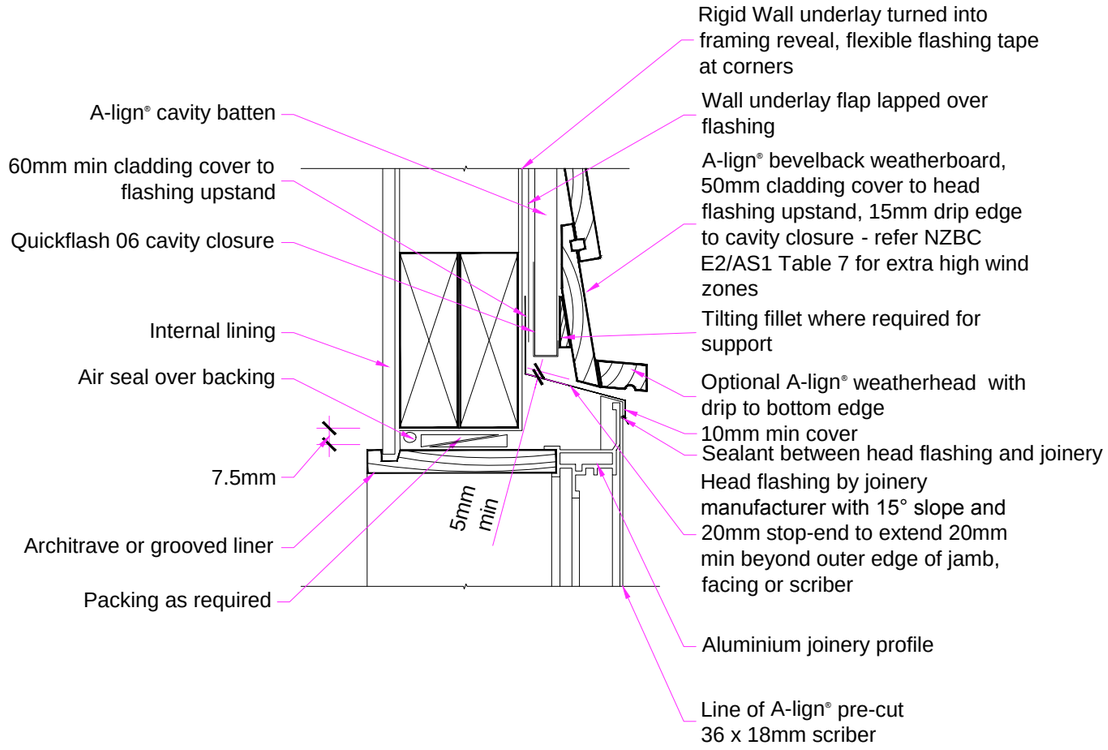

Figure 2.11 A-lign® bevelback weatherboard - cavity - aluminium window head

Scale 1:5

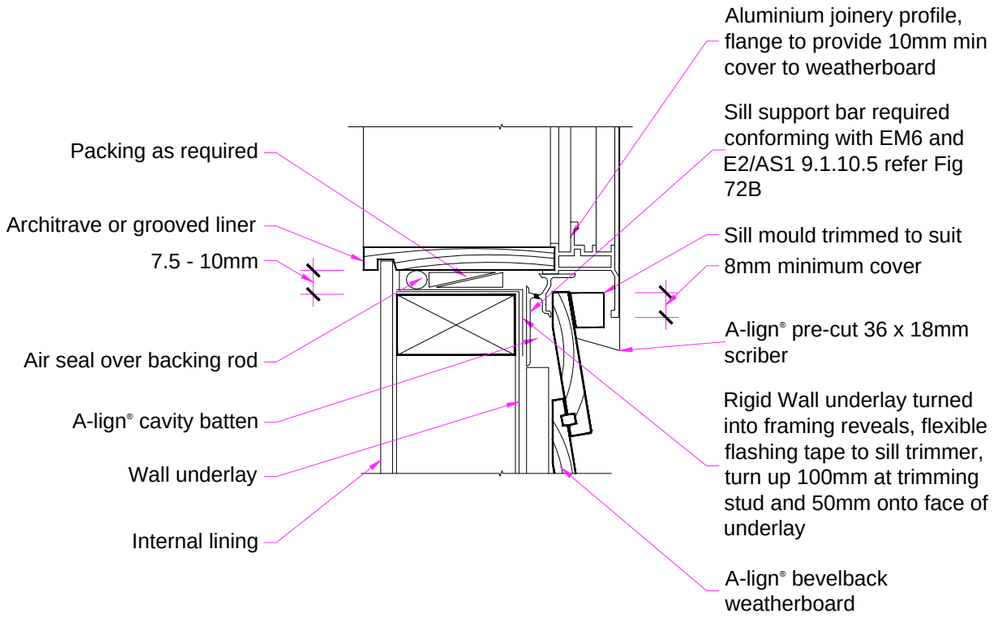

Figure 2.13 A-lign® bevelback weatherboard - cavity - aluminium window sill

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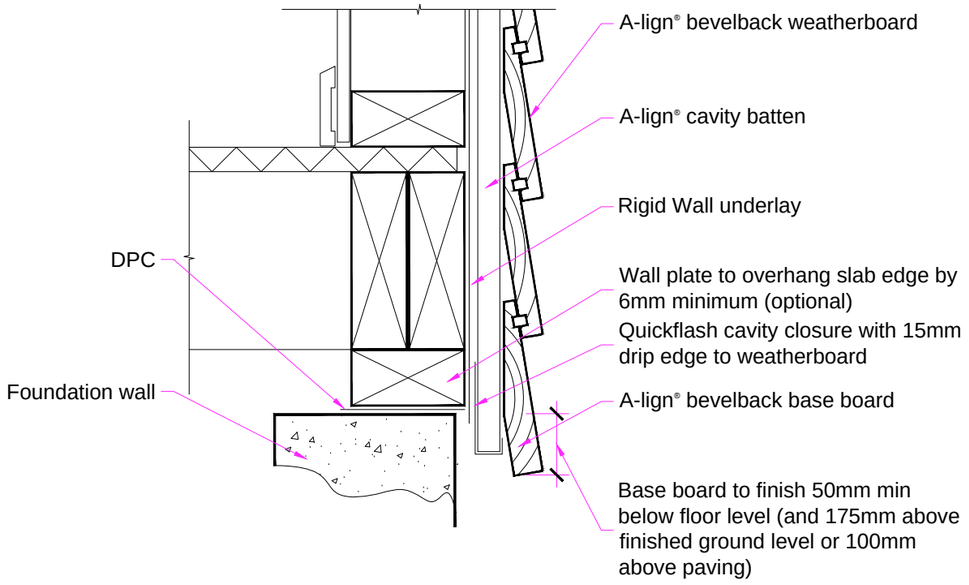

Figure 2.02 A-lign® bevelback weatherboard - cavity - base of wall - timber floor

Scale 1:5

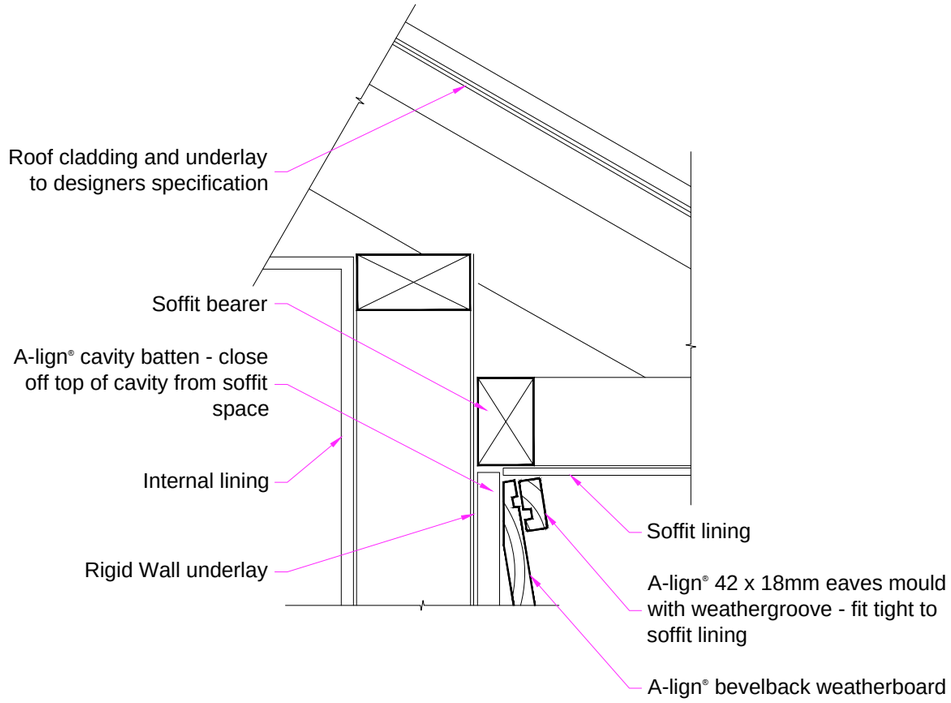

Figure 2.04 A-lign® bevelback weatherboard - cavity - eaves with flat soffit

Scale 1:5

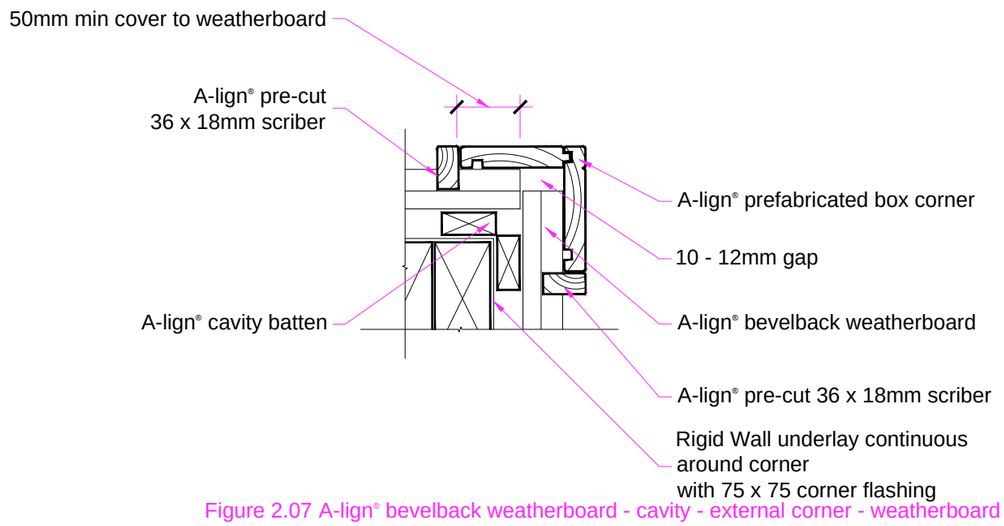

Figure 2.07 A-lign® bevelback weatherboard - cavity - external corner - weatherboard

Scale 1:5

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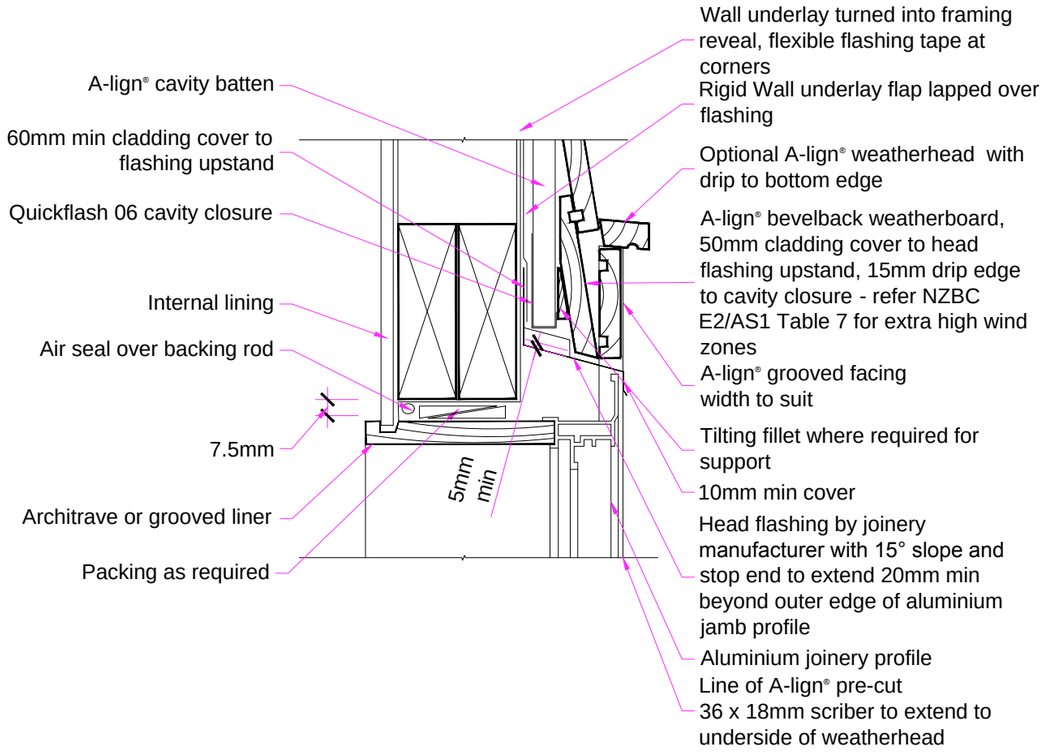
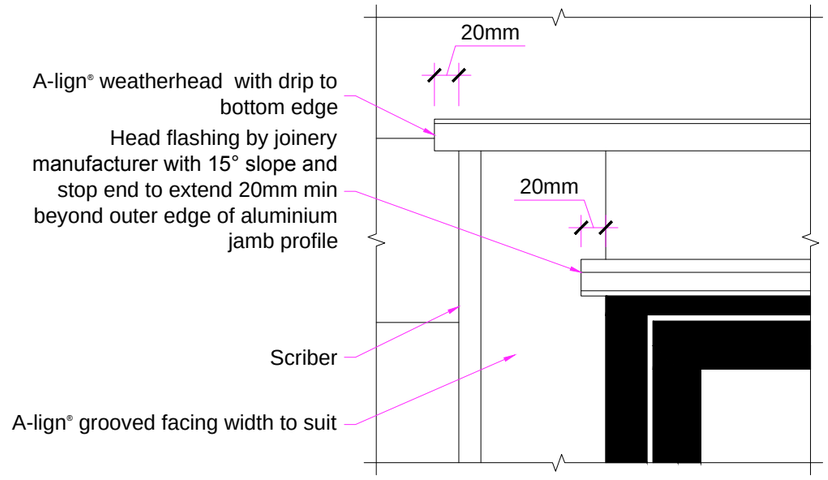
100982	A5-04 / A





Elevation

Figure 2.11 A-lign® bevelback weatherboard - cavity - aluminium window head

Scale 1:5

LIVING ARCHITECTURE
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Telephone 64 9 4077075
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Email bert.draw@gmail.com

Sheet Title
CLADDING TO OUTDOOR LAUNDRY
MINOR DWELLING

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
WAIPAPA

Notes
Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office.

Revision	By	Date
Designed	BVV	05-25
Drawn	BVV	05-25
Reviewed		
Approved		

CAD Ref: 100982
Scale (A3 Original): 1:75 @ A3
Project No: 100982
Sheet: A5-05
Revision: A

GUMBOOTS
CONSULTING ENGINEERS

Ground Condition Report

26 Tanekaha Lane, Kerikeri

For

Tom & Hanneke Van Vliet

Ground bearing capacity check for the proposed relocatable home.
Gumboots Consulting Engineers reference 1348a

09th June 2025

◆0204486697 ◆office@gumbootsconsulting.co.nz ◆www.gumbootsconsultingengineers.co.nz
191 Onekura Road, Kerikeri, Northland 0295

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1. Scope and Objective

The **scope** of work is to assess the ground conditions and general site suitability in accordance with NZS 3604:2011 and related code.

General objectives through our investigations were to ascertain possible construction difficulties, identify land hazards and the **primary objective** of;

- applicability of land for a **building designed**, in accordance with NZS 3604 and specific engineering design where appropriate.

2. Project Details

Table 1 - Project Details

PROJECT DETAILS	
Project Brief from the Client	To ascertain adequate bearing capacity of the proposed building site.
Proposed Building Type	3bdr relocation home [IL2] & 2bdr stand alone unit [IL2]
Project Street Address and Legal Description	26 Tanekaha Lane, Kerikeri Lot 2 DP 197024
Client Details	Tom & Hanneke Van Vliet
Project and Site testing locations	As above
Revision Number	A1.0
Engineering Company Details	Gumboots Consulting Engineers Ltd
Prepared on behalf of Gumboots Consulting Engineers by:	Kelly Wright AF Member of EngNZ
Reviewed/Approved on behalf of Gumboots Consulting Engineers by:	Akira Kepu  Geo-Civil Engineer; Chartered Member of EngNZ (CMEngNZ), TIPENZ, Board Member of EngNZ Northland Branch. Member of NZGS, ISSMGE, SIG EGP & The Sustainability Society.
Date:	09th June 2025
Job Number	1348a

This report has been prepared for Tom & Hanneke Van Vliet in accordance with the brief given to us and current New Zealand *standards* and *acceptable solutions*. Professional recommendations within this report are based on in-situ field test results, empirical relationships and local experiences.

As appropriate, this appraisal shall be read in its entirety to understand the context of the recommendations given.

3. Summary of Desktop Assessment

Table 2 – Summary of Desktop Assessment

SUMMARY OF DESKTOP ASSESSMENT	
List previous geotechnical reports available	Nil
Findings of previous geotechnical reports	N/A
Established Developments onsite.	N/A
Account of the existing infrastructures.	N/A
Geological maps available	As referenced
New Zealand Geotechnical Database (NZGD) date nearby (i.e within ~200m)	Nil
Known geological hazards from Council's GIS or equivalent	Upon review[1] of the Northland Regional Council Hazards maps, it indicates the subject property as not being within flood extent or land hazard area.
Minimum floor level and flooding	N/A
Review of historic aerial photographs - previous HAIL activity / earthworks / building activity at the site	A review of Google aerials [2003 to date] was undertaken in order to observe any changes in landform and/or land use within the site since. **No** significant changes to the site, surrounding area or geomorphic features were observed.
Close-proximity active faults	Nil

1 https://nrcgis.maps.arcgis.com/apps/webappviewer/index.html?id=81b958563a2c40ec89f2f60efc99b13b *accessed 10/05/25*

Topographical assessment of the surrounding area	NRC LiDAR data [OTP64 DEM and Contours] of the subject property and surrounding area was obtained/reviewed. This data set has been overlaid on LINZ NZ Aerial Imagery.
Buried services and structures	Unknown
Anticipated engineering geological model from maps and previous investigations and level of uncertainty in the model	The geological information on hand indicates the site **geology** as Kerikeri Volcanic Group (Pvb); comprising basalt lava, volcanic plugs and minor tuff. The **lithology** comprises basalt [$F6_2$] i.e. flows and cones of very fine to medium grained crystalline basalt. Surfaces form terraces and plateaus generally without rocky outcrops. Dense and moderately fractured; hard to very hard. Landscapes are generally terraces and plateaus without rocky outcrops. Weathered to soft red brown or dark grey brown clay to depths of 20m with many rounded corestones. The map constitutes a regional scale. Therefore, visual observations and shallow boreholes were utilised to account for this purpose. As specific to the subject site. LandCare Research indicates the **soils** encountered here as Orthic Oxidic [XO]. These clayey soils result from the weathering of andesite, dolerite or basalt rock or ash over extensive periods of time. They cover 1% of New Zealand and are known only in the Auckland and Far North Region. Oxidic Soils [X] Contain appreciable amounts of iron and aluminium oxides well-developed, relatively stable structure. Clay contents are high, ranging from 50 to 90%. Soil water deficits are common in summer. Oxidic soils are strongly weathered and clays have low cation exchange capacity at the natural pH of the soil. These soils have *slow permeability*. More reference can be noted that these are soils of the Rolling and Hill lands i.e. Pungaere gravelly friable clay (PG) - *moderately well drained*. All in all it can be concluded that the soils encountered here more greatly reflect the historical effects of local conditions. The maps constitute a regional scale. Therefore, visual observations and shallow boreholes were utilised to account for this purpose. As specific to the subject site.

References: Geology of the Whangarei Area. Institute of Geological & Nuclear Sciences; 1: 250,000 geological map 2. Lower Hutt, New Zealand.

NZMS Sheet 290 P 04/05, part sheet O 03, 1:100,000 scale map, Edition 1, 1982: "*Whangaroa-Kaikohe"* (Rocks).

Manaaki Whenua LandCare Research: New Zealand Soil Classification (NZSC) - Soil Order.

A.S. 2870, “Residential Slab and Footings - Construction”.

3.1 Limited Liability

This report has been prepared exclusively for Tom & Hanneke Van Vliet in accordance with the brief given to us, the agreed scope and in general accordance with current standards, codes and best practice at the time of this writing. Therefore, they shall be deemed the exclusive owner on full and final payment of the invoice.

Information, assumptions, and recommendations contained within this report can only be used for the purposes with which it was intended. Gumboots Consulting Engineers accepts no liability or responsibility whatsoever for;

1. any use or reliance on the report by any party other than the owner or parties working for or on behalf of the owner, such as local authorities, and for purposes beyond those for which it was intended.
2. any omissions or errors that may befall from inaccurate information provided by the Client or from external sources.

Outcomes given in this report are based on visual methods and subsurface investigations at discrete locations designed to the constraints of the project scope to provide the best assessment of the environment and subsurface conditions.

Therefore, it must be appreciated that the nature and continuity of the subsurface materials between these locations are inferred and that actual conditions could vary from that described herein. We should be contacted immediately if the conditions are found to differ from those described in this report. Accordingly, further investigations/observations shall then be undertaken as appropriate.

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

4. Ground Investigations

4.1 Investigation Undertaken

To evaluate the subsurface conditions at the site on 02nd and 19th of May 2025. Investigation data can be found in Appendix B.

The following tests and soil descriptions have been undertaken in accordance with New Zealand Geotechnical Society [NZGS] Field Guide for the description of Soil and Rock, 2005.

Table 3 - Ground Investigations

Test Type	Number of tests	Maximum Depth (mBGL)	Average depth (mBGL) min 2m	Test standard followed
Scala penetrometer	-	-	-	NZS:3604
Hand Auger[2]	4	2.90	-	As above
Test Pit	**-**	**-**	**-**	-
Shear Vane	33	2.90	-	NZGS Guideline for Hand Held Shear Vane Test 2001*

New Zealand Ground Investigation Specification Vol 1

4.2 Subsoil Profile

Subsoil Model Profile.

Table 4 - Geotechnical Model Subsoil Profile encountered

Soil Type	Depth from (m)	Depth to (m)	Consistency/ density (NZGS)	Scala penetrometer range	Undrained shear strength (range) and remoulded range [kPa]
Silty CLAY	0.20	2.90	very stiff	-	≥ 202

4.3 Groundwater

Groundwater was not encountered. Static groundwater pressure within the mantle can be considered in the order of zero.

Water bores [north ≅0.7km, depth = 37m and west ≅1.15km, depth = 24m] of the property indicate **static water levels** at **-5.0m** and **-12.7m** respectively**.**

4.4 Laboratory Testing

Two samples for Atterberg Limits and Linear Shrinkage tests taken from the site were generally within the zone of likely influence of shallow foundations. These preliminary tests were in accordance with NZS 4402 - Sections 2.1, 2.2, 2.3, 2.4 & 2.6 respectively “Methods of Testing Soils for Civil Engineering purposes”.

These index tests were primarily intended to give a likely indication of the subsoil behaviour, characteristics and conditions at its natural undisturbed state. Refer to Appendix 2.5 for results.

[2] *Minimum required depth 2m or justifiable refusal*

5. Investigation Findings

The residual soils encountered are predominantly cohesive. This section summarises the subground condition as we observed it during our site visit.

5.1 Fill Soils

None encountered within the proposed building area and locale.

5.2 Residual Soils

The soils encountered were very stiff and very hard to drill with hand tools.

5.3 Expansive Soils

The *magnitude* of soil expansivity is primarily dependent on the *kind* and *amount* of clay minerals present, their exchangeable ions and internal structure. There are three important clay mineral groups; *montmorillonite*, *illite* and *kaolinite*. **Montmorillonite** is the known clay mineral with most expansive problems.

The encountered soils are inferred to comprise ***none of the above*** minerals.

5.4 Discussion on Residual Minerals

Allophane 1.0–2.0SiO2·Al_2O_3·2.5–3.0H_2O and imogolite $(OH)_3$·Al_2O_3·SiOH; allophane and/or imogolite are indicators of immature soils formed via alteration of volcanic material; allophane and imogolite can be identified in soils by their dissolution in 0.2 M oxalate-oxalic acid at pH 3; *"Both minerals readily adsorb H_2O and hold significantly more H_2O per formula unit under moist conditions than under dry conditions.* https://pubs.geoscienceworld.org/clays/ccm/article/61/1/57/48830/Spectral-and-hydration-properties-of-allophane-and?searchresult=1.

Imogolite and imogolite-like materials are being explored for applications in gas capture, separation, catalysis, and contaminant remediation.

The site can be deemed *non* expansive based on;

- the residual *minerals* [highlighted above & table 2 - soils] associated within the in-situ soils encountered.

6. Geological Risk Assessment

Table 5 - Geotechnical Risk Assessment

Risk	Consequence	Rating	Proposed mitigation
Slope stability risk, address both risk of inundation from above as well as global stability and instability from below; referring published hazard maps and local knowledge	Foundation damage	**L**	The building site is near flat [2°] and falls homogeneously north. **No** signs of ground movement within the building platform area were observed. This generally proves fundamental stability of the land. In this case, confidence impresses a positive assurance that; ● Full saturation is highly unlikely due to the favourable topography of the land and low permeable subsoil characteristics. ● Established residential within the locale show **no** signs of fretting as a sign of land movement. ● The *PFO*[3] in all aspects i.e. areas of mature and regenerated native trees and vegetation, readily enforce *functional land resilience*. **Global instability** is less likely due to the aforementioned, our local experience and observations within the area and favourable lithology therein.
'Good ground' as per NZS 3604	Foundation damage	**L**	Adequate bearing ground in accordance with NZS:3604.
Liquefiable deposits present below depth of investigated soils	Foundation damage	**L**	None encountered.
Potentially compressible soils (recent alluvial soils (e.g. silts/peats); refer published hazard maps and local knowledge)	Settlement	**L**	None encountered.

[3]*prominent flora occupation..*

Close-proximity active fault risk - has fault location been established / is min offset met?	Settlement	**L**	None indicated within the GNS Whangarei Map 2: Geology.
Adverse effects of expansive soils	Foundation damage	**L**	N/A.
Flooding risk (refer published hazard maps and local knowledge)	Inundation	**L**	N/A.
Expansive soils as per NZS 3604	Cracking of concrete floors i.e. n/a in this case	**L**	The site can be deemed *non* expansive based on; 1. the residual minerals within the in-situ soils encountered. 2. Observations onsite revealed *no* signs of shallow desiccation which indicate shrunken material due to water depletion over the dry months. 3. Piled foundations = suspended flooring is *not* affected by any ground fretting in this case.

7. Executive Summary

The following sections are generally based on our observations of the site. A floor plan was provided to us at the time of writing. Full concept plans were not available during this time.

7.1 Ground Bearing Capacity

Natural soils onsite below cleared ground level can achieve adequate undrained shear strengths ≥ 100kPa. Based on the field test results, it can be concluded that the current subgrade regime is well packed and can provide an adequate supporting platform here.

7.2 Pile Construction

House piles;

1. All bored pile holes shall be free of borings and other deleterious materials prior pouring.

2. Piles[4] shall not be loaded with the dead weight of the minor dwelling until the concrete is a minimum of 24 hours old. The concrete shall have a slump of not more than 60mm at the time of placing. If at any time during the 24 hours the ambient temperature drops below 10^0C, then the time before loading shall be extended to 48 hours.

3. Divert all surface flows away from the house area.

4. A **PS3** shall be submitted by the contractor[s] attesting to the foundation construction and other related work undertaken in accordance with the approved architectural plans and related documents.

7.3 Foundation Design

Residual soils onsite below the cleared ground level were shown to have adequate bearing capacity.

Piles can be designed in accordance with NZS 3604:2011.

Table 6 - Site Specific Data

Site Specific Subsoil Data	
Minimum Ultimate Bearing Capacity	300 kPa
Strength Reduction Factor ULS [Øs]	0.5
Shallow Soil Classification as per NZS1170.5:2004	Class C
Site Classification as per AS 2870	S
Liquefaction Soils	No
Good Ground in accordance with NZS 3604	Yes

7.4 SW design

Runoff anticipated from the proposal is designated to the roof area. Water tanks are anticipated to capture this runoff with overflow dissipated overland away from the building. The activity output in this case is considered less than minor.

7.5 Conclusion

It is my professional opinion on behalf of Gumboots Consulting Engineers Ltd that land on the subject property (Lot 2 DP 197024) is fit for purpose and can support the proposed home.

There is less than minor,

1. Significant risk from natural hazards, and;

[4] *NZS 3604 - "Timber Framed Buildings", Section 6.*

2. The building work is likely to NOT accelerate, worsen, or result in a natural hazard on this land or any other property.

3. The contractor to ensure that the proposed work must not induce subsequent ill effects to the equilibrium state of the site at present.

References:

Geology of the Whangarei Area. Institute of Geological & Nuclear Sciences; 1: 250,000 geological map 2. Lower Hutt , New Zealand.

New Zealand Land Inventory - NZMS Sheet 290 P 04/05, 1:100,000 scale map, Edition 1, 1982: "*Whangaroa-Kaikohe"* (Rocks).

A.S. 2870, "Residential Slab and Footings - Construction".

NZS 3604, "Timber Framed Buildings"

Manaaki Whenua LandCare Research: New Zealand Soil Classification (NZSC) - Soil Order.

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Appendix A

No.	Attachments	Scale
1.1	Geology Map	-
1.2	Site Location	-
1.3	Natural Hazards Map	-

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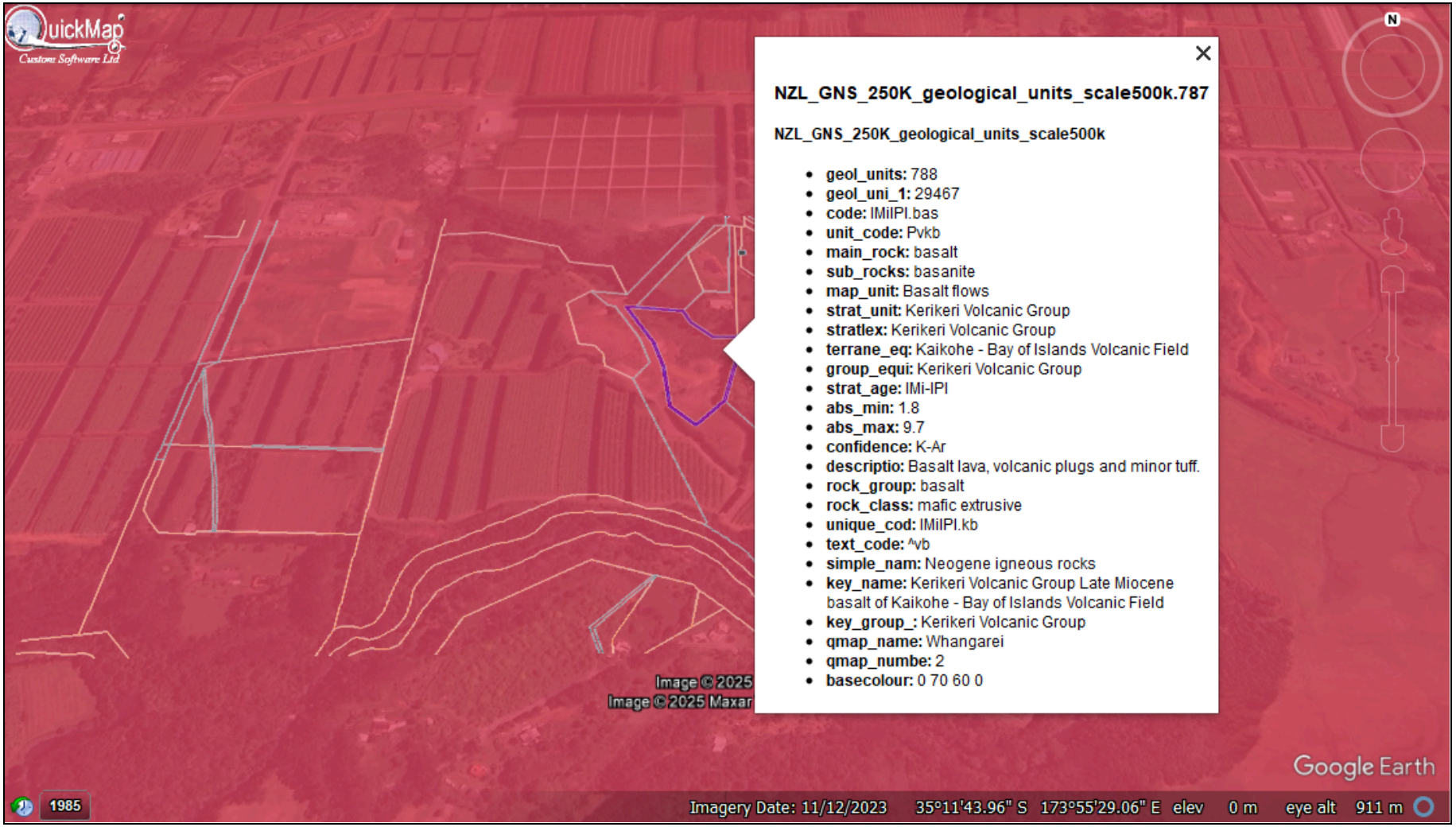
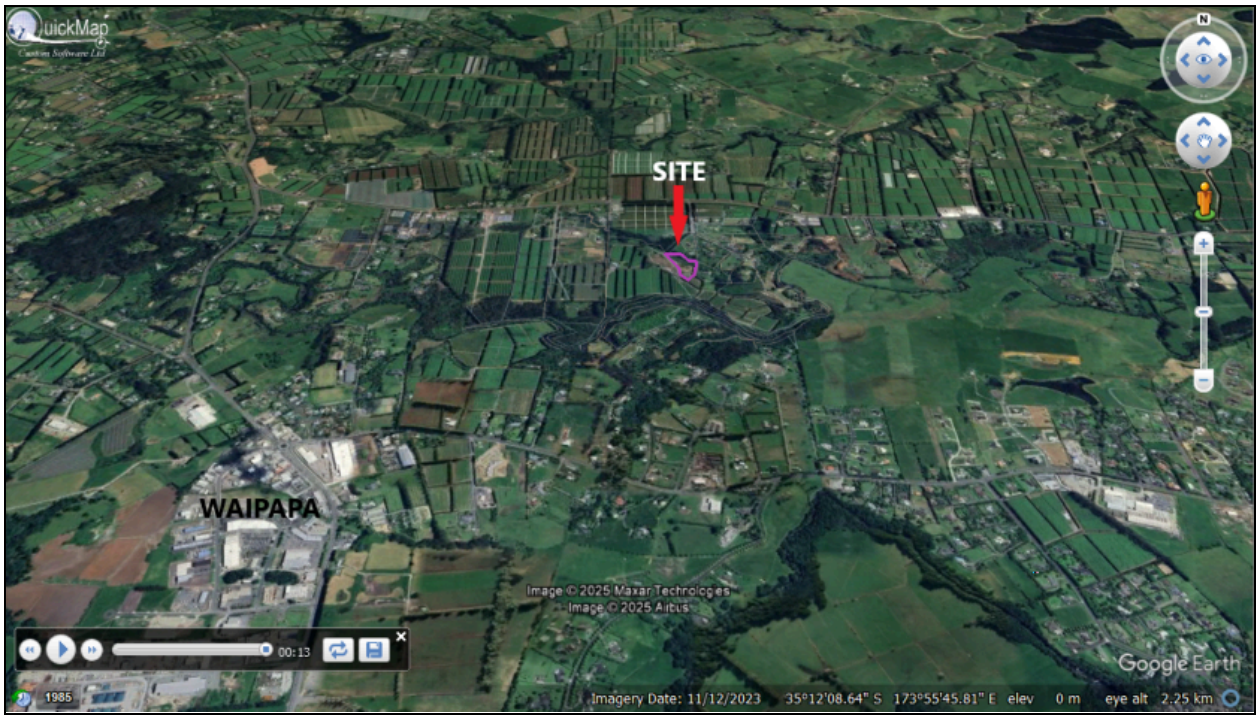
1.1 Geology Map

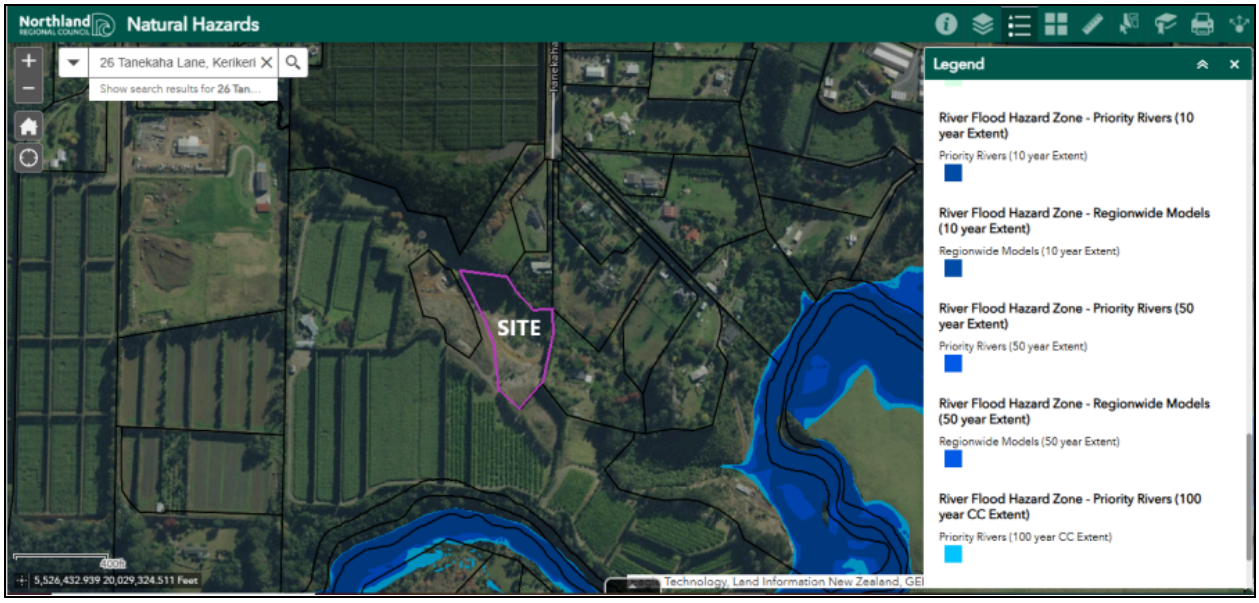


Map excerpt; Quick Maps and Google Earth.

1.2 Site Location



1.3 Natural Hazards Map



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Appendix B

No.	Attachments	Scale
2.0	Borehole Location Plan	1:150
2.1	Borehole Log 1	-
2.2	Borehole Log 2	-
2.3	Borehole Log 3	-
2.4	Borehole Log 4	-
2.5	Lab Test Results	-

2.0 Borehole Location Plan (Excerpt from DroneX aerial images, 1m contour lines from NRC LiDAR 2018 - 2019. Scale = 1:150)

2.1 Borehole Log 1

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BOREHOLE LOG No. 1 — **Hole Location: Refer to Site Plan** — **JOB No. 13 48**

CLIENT:	Tom van Vliet	**SITE:**	26 Tanekaha Lane, Kerikeri.		
Date Started:	02/05/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	AK
Date Completed:	02/05/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	KW

Soil Description (Based on NZGS Logging Guidelines 2005)	Depth (m)	Graphic Log	Geology	Water Level	Sensitivity	Corrected Shear Vane Strength (kPa)	Dynamic Cone Penetrometer (blows/100mm drop)
Silty CLAY, brown to yellowish brown, very stiff, moist and high palsticity.							
moist	0.5					202	
moist						202	
brown, very stiff, damp and high plasticity.	1.0					202	
orangish brown damp						202	
inclusion of fine to medium sub rounded gravels	1.5					202	
pinkish red clayey streaks damp and very stiff						202	
grey speckles of silt	2.0					202	
inclusion of fine to medium sub rounded gravels damp						202	
brown damp	2.5						
EOBH @ 2.50m.							
	3.0						
	3.5						
	4.0						
	4.5						
	5.0						

Kerikeri Volcanic Group (Pvb).

NO Groundwater Encountered.

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

UTP - Unable to Penetrate
DCP- Dynamic Cone Penetrometer
EOBH - End of Borehole
EODCP - End of DCP

Notes - AL & LS sampled @ 2.50m.

Average Scala Blows	0.0
Average Soil Sensitivity	0.0

2.2 Borehole Log 2

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New Zealand

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BOREHOLE LOG No. 2 — Hole Location: Refer to Site Plan — **JOB No. 13 48**

CLIENT:	Tom van Vliet	**SITE:**	26 Tanekaha Lane, Kerikeri.		
Date Started:	02/05/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	AK
Date Completed:	02/05/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	KW

Soil Description (Based on NZGS Logging Guidelines 2005)	Depth (m)	Graphic Log	Geology	Water Level	Sensitivity	Corrected Shear Vane Strength (kPa)	Dynamic Cone Penetrometer (blows/100mm drop)
Silty CLAY, red to reddish brown, very stiff, moist and high palsticity.							0 1
moist						202	
moist	0.5						
moist and very stiff						202	
pinkish red clayey streaks							
damp	1.0					202	
yellowish brown with fine rounded gravels						202	
moist	1.5						
orange speckled grey						202	
	2.0					202	
damp grey sandy silt pockets						202	
grey speckles of silt	2.5		Kerikeri Volcanic Group (Pvb).	NO Groundwater Encountered.		202	
UTP @ 2.50m.	3.0						
	3.5						
	4.0						
	4.5						
	5.0						

LEGEND

TOPSOI | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

UTP - Unable to Penetrate
DCP- Dynamic Cone Penetrometer
EOBH - End of Borehole
EODCP - End of DCP

Notes - AL & LS sampled @ 1.00m.
- Natural Moisture Content sampled @ 1.20m.

Average Scala Blows	0.0
Average Soil Sensitivity	0.0

2.3 Borehole Log 3

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BOREHOLE LOG No. 3 Hole Location: Refer to Site Plan **JOB No. 13 48**

CLIENT:	Tom van Vliet	**SITE:**	26 Tanekaha Lane, Kerikeri.		
Date Started:	02/05/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	AK
Date Completed:	02/05/2025	**HOLE DIAMETER (mm)**	80mm	**CHECKED BY:**	KW

Soil Description (Based on NZGS Logging Guidelines 2005)	Depth (m)	Graphic Log	Geology	Water Level	Sensitivity	Corrected Shear Vane Strength (kPa)	Dynamic Cone Penetrometer (blows/100mm drop)
TOPSOIL, silty clay, dark brown and damp.							
Silty CLAY, brown, very stiff, moist and high palsticity.			Kerikeri Volcanic Group (Pvb).	NO Groundwater Encountered.		202	
moist	0.5					202	
very stiff, moist and high plasticity.						202	
grey silt pockets						202	
damp	1.0					202	
orangish brown	1.5					202	
damp						202	
moist grey sandy silt pockets	2.0					202	
greyish white speckles of silt						202	
damp and very stiff	2.5					202	
pinkish red clayey streaks inclusion of fine rounded gravels						202	
UTP @ 2.90m.	3.0						
	3.5						
	4.0						
	4.5						
	5.0						

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

UTP - Unable to Penetrate
DCP - Dynamic Cone Penetrometer
EOBH - End of Borehole
EODCP - End of DCP

Notes -

Average Scala Blows	0.0
Average Soil Sensitivity	0.0

2.4 Borehole Log 4

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New Zealand

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BOREHOLE LOG No. 4 Hole Location: Refer to Site Plan **JOB No. 13 48**

CLIENT:	Tom van Vliet	**SITE:**	26 Tanekaha Lane, Kerikeri.		
Date Started:	02/05/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	AK
Date Completed:	02/05/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	KW

Soil Description (Based on NZGS Logging Guidelines 2005)	Depth (m)
TOPSOIL, silty clay, dark brown and damp with rootlets.	
Silty CLAY, brown, very stiff, moist and high plasticity.	
	0.5
moist	
very stiff, moist and high plasticity.	
light grey pockets, moist and high plasticity	1.0
inclusion of fine to medium sub rounded gravels	1.5
pinkish red clayey streaks damp	
moist grey sandy silt pockets	2.0
greyish white speckles of silt	
damp and very stiff	2.5
UTP @ 2.50m.	3.0
	3.5
	4.0
	4.5
	5.0

Graphic Log: Kerikeri Volcanic Group (Pvb).

Geology: NO Groundwater Encountered.

Water Level

Sensitivity

Corrected Shear Vane Strength (kPa): 202 202 202 202 202 202 202 202

Dynamic Cone Penetrometer (blows/100mm drop): 0 1

LEGEND

TOPSOIL CLAY SILT SAND GRAVEL FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

UTP - Unable to Penetrate
DCP- Dynamic Cone Penetrometer
EOBH - End of Borehole
EODCP - End of DCP

Notes - Natural Moisture Content sampled @ 0.40m.
- Natural Moisture Content sampled @ 1.20m.
- Natural Moisture Content sampled @ 1.80m.

Average Scala Blows	0.0
Average Soil Sensitivity	0.0

2.5 Lab Test Results

CIVIL LAB GROUP TAUTUA

Waipapa Laboratory
191 Onekura Rd
Kerikeri
0204 486 697
civillabgrouptautua@gmail.com

TEST REPORT

Lab Job No: CLG1016

Your Ref: GCE#1348

Date of Issue: 27/05/2025

Date of Re-Issue: -

Page: 1 of 6

Test Report No.
CLG1016-R001

Project: **GCE#1348 - Laboratory Testing**

Client: Gumboots Consulting Engineers

Attention: Kelly

Test Methods: Determination of the liquid & plastic limits, plasticity index and water content
NZS 4402:1986 Tests 2.1,2.2,2.3,2.4
Determination of the Linear Shrinkage
NZS 4402:1986 Test 2.6

SAMPLING METHOD: Sampled by Client

TEST RESULTS: As per attached sheets

K. Wright — Administrator

A. Kepu — Approved Signatory

QUALITY ASSURANCE

All tests reported herein have been performed in accordance with the relevant standards.
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DETERMINATION OF THE WATER CONTENT
NZS 4402:1986 Test 2.1

Lab Job No: CLG1016
Client: Gumboots Consulting Engineers
Location: GCE#1348
As per table below
Date Received: 05/05/2025
Report No: CLG1016-R001
REF: GCE#1348

Sample No: CLG1016: S001- S003
Tested By: E.K
Date Tested: 15/05/2025
Checked By: A.K
Date Checked: 16/05/2025
Page: 2 of 6

Sampling Method: Sampled by client
Date Sampled: 02/05/2025
Test Details:

Sampled By: Client

Test performed on: Fraction crumbled
Sample history: Natural state

Sample No.	Test Sample Location	Date Sampled	Description of Sample	Natural Moisture Content %
S001	BH4 @ 0.4m BGL	02/05/25	Silty CLAY, brown, very stiff, moist and high plasticity.	43.8
S002	BH4 @ 1.2m BGL	02/05/25	Silty CLAY, brown, light grey pockets, very stiff, damp and high plasticity.	53.3
S003	BH4 @ 1.8m BGL	02/05/25	Silty CLAY, brown, grey sandy silt pockets, stiff, damp and high plasticity.	56.4

QUALITY ASSURANCE

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DETERMINATION OF THE LIQUID & PLASTIC LIMITS, PLASTICITY INDEX & WATER CONTENT
NZS 4402:1986 Test 2.2, 2.3, 2.4

Lab Job No:	CLG1016	**Sample No:**	CLG1016-S001
Client:	Gumboots Consulting Engineers	**Tested By:**	E.K
Location:	GCE#1348 BH1 @ 2.5m below ground level	**Date Tested:**	15/05/2025
		Checked By:	A.K
Date Received:	05/05/2025	**Date Checked:**	16/05/2025
Report No:	CLG1016-R001	**Page:**	3 of 6
REF:	GCE#1348		

Sampling Method: Sampled by client
Sampled By: Client
Date Sampled: 02/05/2025
Test Details:

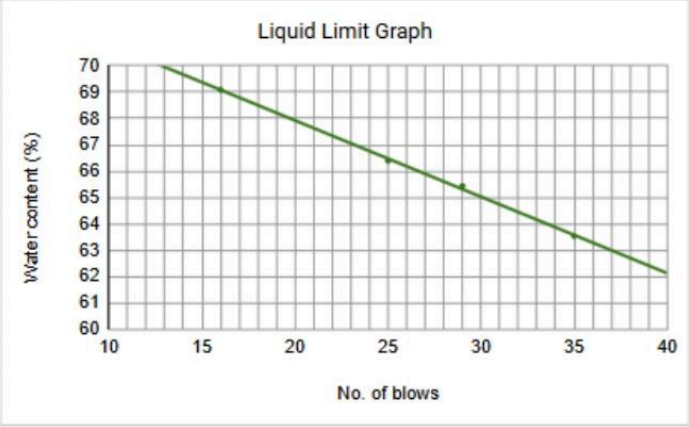
Test performed on:	Fraction passing 425mm sieve
Sample history:	Natural state

Description of Sample: Silty CLAY, brown, very stiff, moist and high plasticity.

	Liquid Limit			
No. of blows	16	25	29	35
Water content (%)	69.09	66.39	65.44	63.53

Plastic Limit	
47.83	48.41

NWC	
Liquid Limit	66.39
Plastic Limit	48.12
Plasticity Index	18.27



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DETERMINATION OF THE LINEAR SHRINKAGE
NZS 4402:1986 Test 2.6

Lab Job No:	CLG1016	**Sample No:**	CLG1016-S001
Client:	Gumboots Consulting Engineers	**Tested By:**	E.K
Location:	GCE#1348 BH1 @ 2.5m below ground level	**Date Tested:**	15/05/2025
		Checked By:	A.K
Date Received:	05/05/2025	**Date Checked:**	16/05/2025
Report No:	CLG1016-R001	**Page:**	4 of 6
REF:	GCE#1348		

Test Performed on: Fraction passing 425mm sieve
History: Natural state

Description of Sample: Silty CLAY, brown, very stiff, moist and high plasticity.

Linear Shrinkage	9

QUALITY ASSURANCE

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DETERMINATION OF THE LIQUID & PLASTIC LIMITS, PLASTICITY INDEX & WATER CONTENT
NZS 4402:1986 Test 2.2, 2.3, 2.4

Lab Job No: CLG1016
Client: Gumboots Consulting Engineers
Location: GCE#1348
BH2 @ 1.0m below ground level
Date Received: 05/05/2025
Report No: CLG1016-R001
REF: GCE#1348

Sample No: CLG1016-S002
Tested By: E.K
Date Tested: 15/05/2025
Checked By: A.K
Date Checked: 16/05/2025
Page: 5 of 6

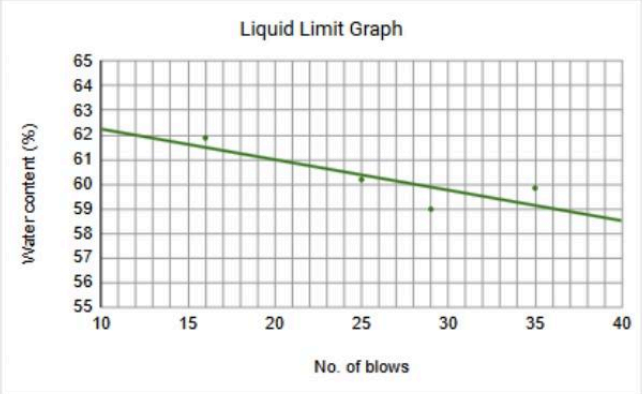
Sampling Method: Sampled by client
Sampled By: Client
Date Sampled: 02/05/2025
Test Details:
Test performed on: Fraction passing 425mm sieve
Sample history: Natural state

Description of Sample: Silty CLAY, red to reddish brown, very stiff, moist and high plasticity.

	Liquid Limit			
No. of blows	16	25	29	35
Water content (%)	61.88	60.18	58.98	59.84

Plastic Limit	
43.19	47.37

NWC	
Liquid Limit	60.18
Plastic Limit	45.28
Plasticity Index	14.9



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DETERMINATION OF THE LINEAR SHRINKAGE
NZS 4402:1986 Test 2.6

Lab Job No:	CLG1016	**Sample No:**	CLG1016-S002
Client:	Gumboots Consulting Engineers	**Tested By:**	E.K
Location:	GCE#1348 BH2 1.0m below ground level	**Date Tested:**	15/05/2025
		Checked By:	A.K
Date Received:	05/05/2025	**Date Checked:**	15/05/2025
Report No:	CLG1016-R001	**Page:**	6 of 6
REF:	GCE#1348		

Test Performed on: Fraction passing 425mm sieve
History: Natural state

Description of Sample: Silty CLAY, red to reddish brown, very stiff, moist and high plasticity.

Linear Shrinkage	8

QUALITY ASSURANCE

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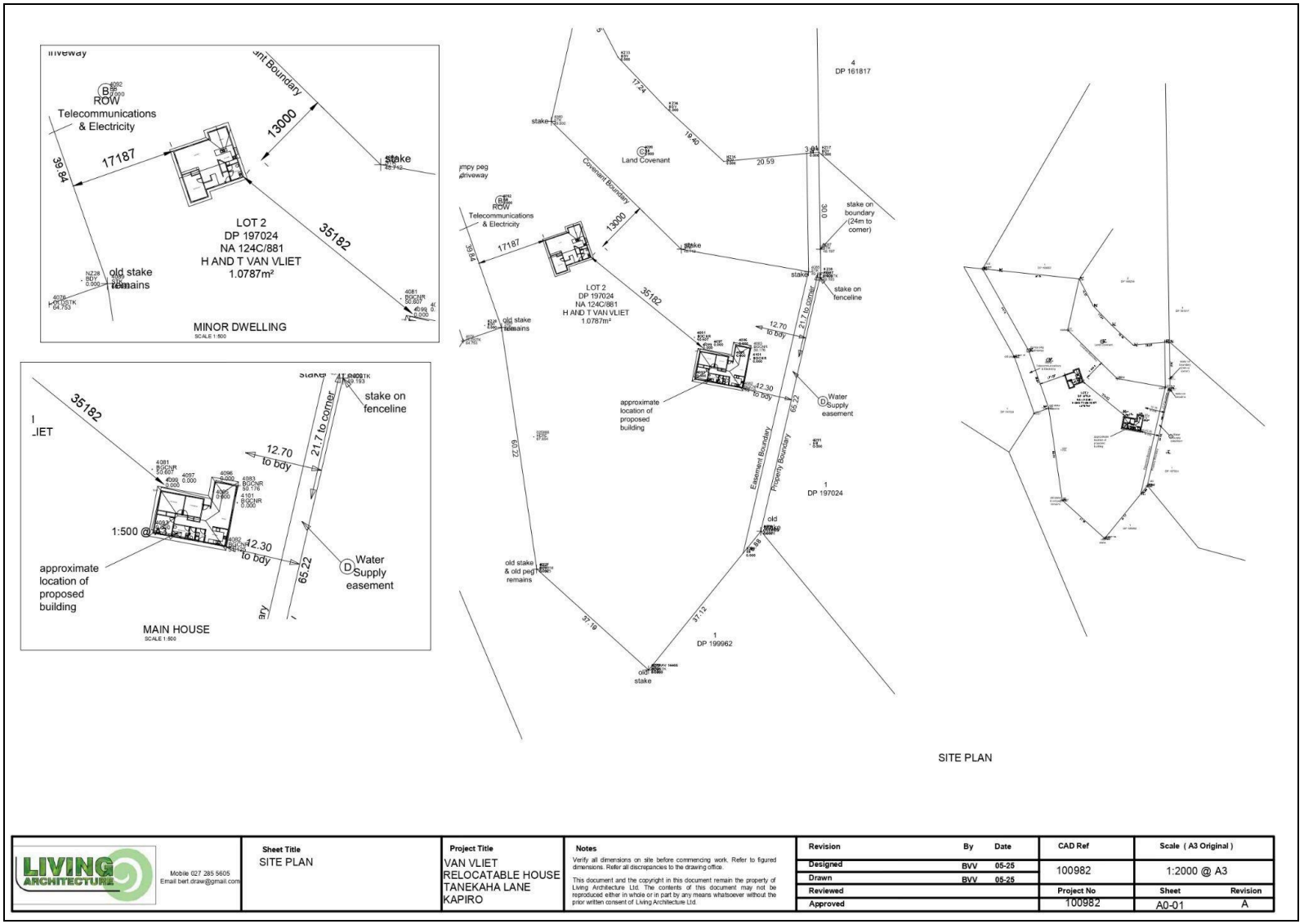
Appendix C

No.	Attachments	Scale
3.0	Site Plan	1:2000
3.1	Floor Plan - House	-
3.2	Floor Plan - Unit	-
3.3	PS2	-

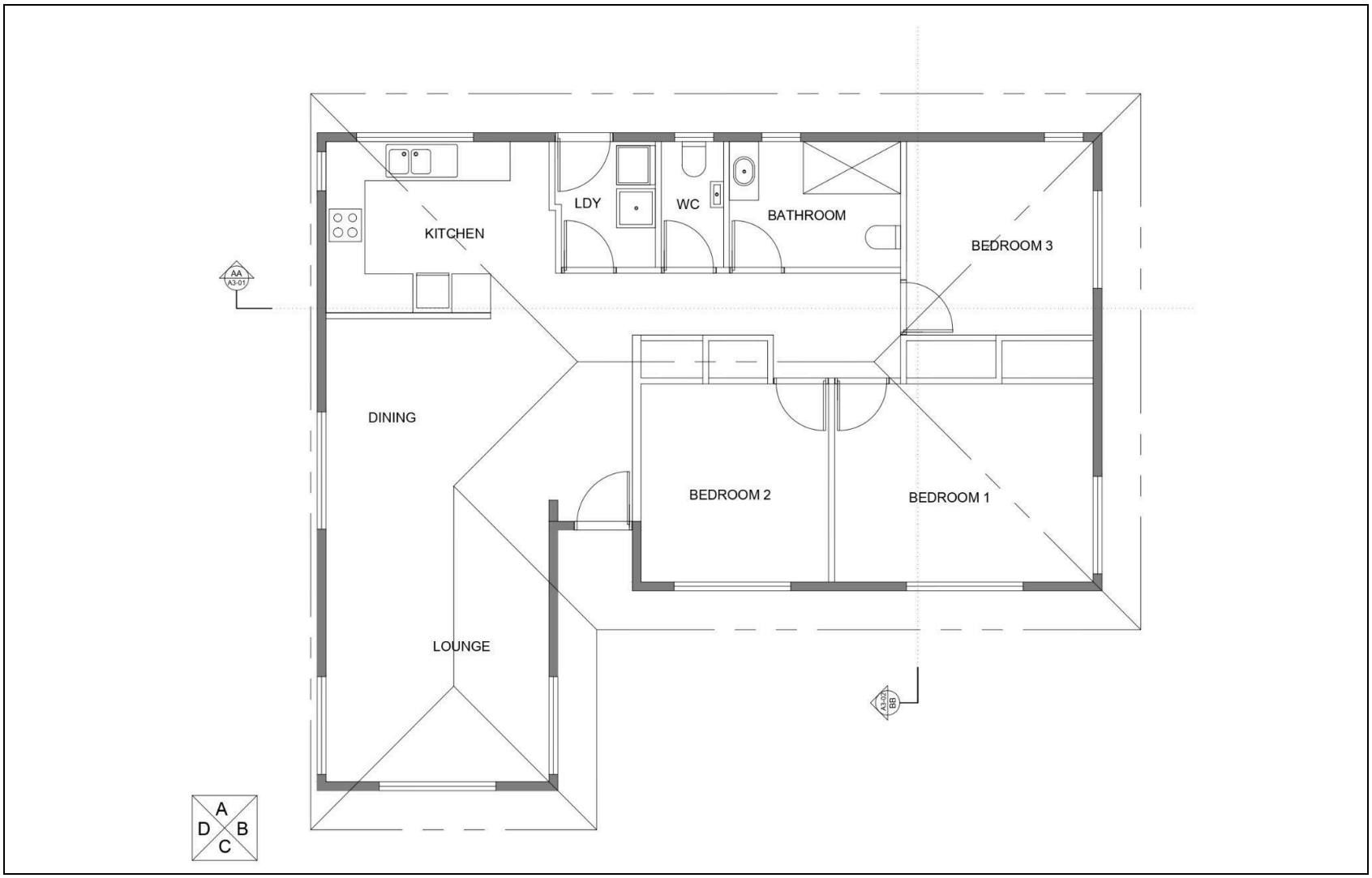
Gumboots Consulting Engineers Ltd | 191 Onekura Rd, Kerikeri 0295
P 0204486697 | E office@gumbootsconsulting.co.nz

3.0 Site Plan

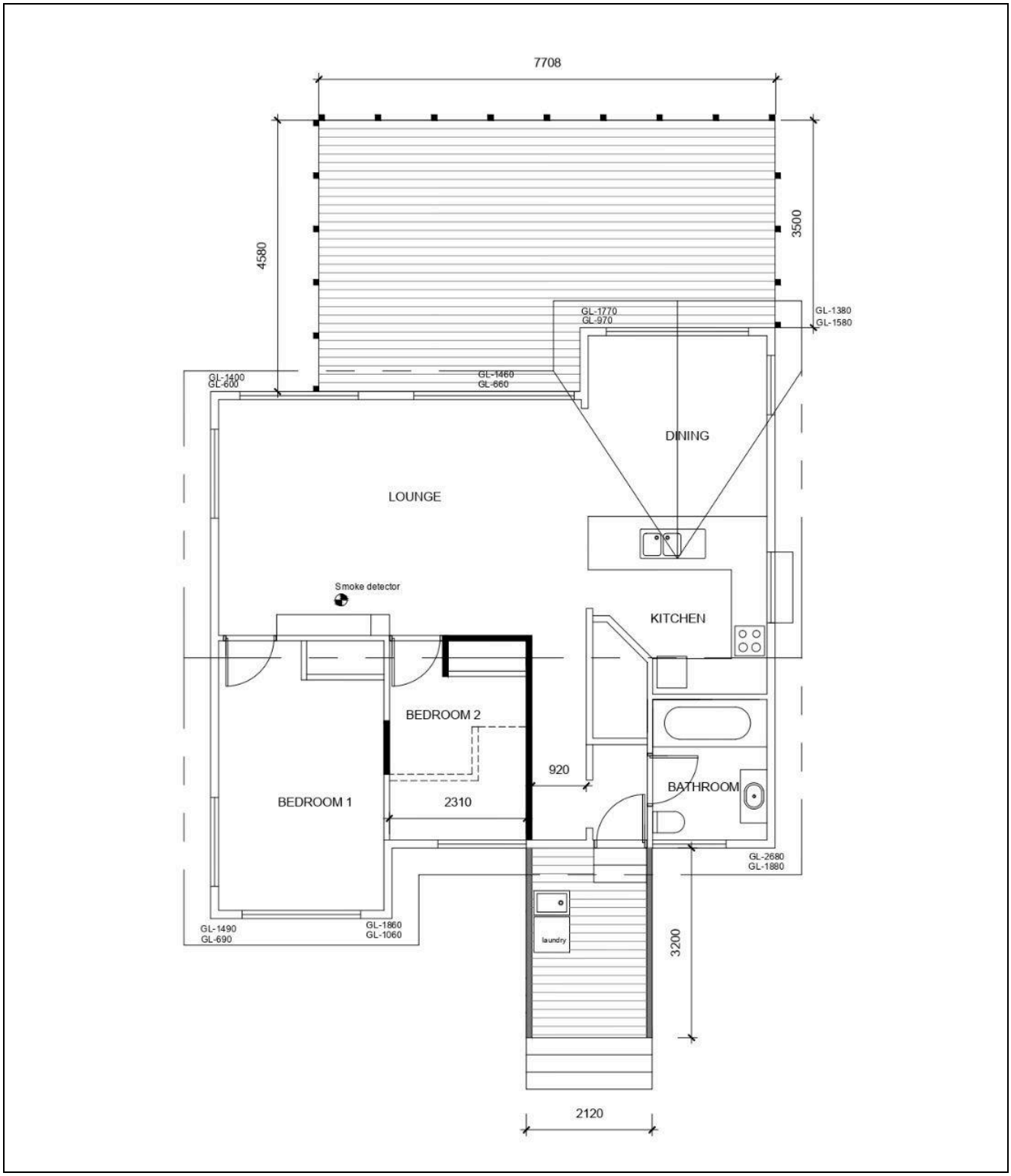


LIVING ARCHITECTURE Mobile 027 285 5605 Email bert.draw@gmail.com	**Sheet Title** SITE PLAN	**Project Title** VAN VLIET RELOCATABLE HOUSE TANEKAHA LANE KAPIRO	**Notes** Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office. This document and the copyright in this document remain the property of Living Architecture Ltd. The contents of this document may not be reproduced either in whole or in part by any means whatsoever without the prior written consent of Living Architecture Ltd.	**Revision** / **By** / **Date** Designed BVV 05-25 Drawn BVV 05-25 Reviewed Approved	**CAD Ref** 100982 **Project No** 100982	**Scale (A3 Original)** 1:2000 @ A3 **Sheet** A0-01 **Revision** A

3.1 Floor Plan - House



3.2 Floor Plan - Unit



T. DRUPSTEEN Consulting Engineer
B.E. CPEng, IntPE. M.I.P.E.N.Z.
3264 SH 12, RD 3 Kaikohe 0473
Ph 64 9 401 4737 Fax 64 9 401 4738
Email: drupsteenthijs65@gmail.com

engineering — New Zealand Institute of Architects Incorporated

Building Code Clause(s) B1

TD ref 25/56 Gumboots CE ref: 1348a

PRODUCER STATEMENT – PS2 – DESIGN REVIEW

(Guidance on use of Producer Statements (formerly page 2) is available at www.engineeringnz.org)

ISSUED BY: T. Drupsteen CPEng
(Design Review Firm)

TO: Tom & Hanneke van Viet
(Owner/Developer)

TO BE SUPPLIED TO: Far North District Council
(Building Consent Authority)

IN RESPECT OF: Soil Assessment Report
(Description of Building Work)

AT: 26 Tanekaha Lane,
(Address)

Town/City: Kerikeri **LOT** 2 **DP** 197024
(Address)

We T. Drupsteen CPEng have been engaged by Gumboots Consulting Engineers
(Design Review Firm)

to review the ~~design documents~~ soil assessment report for this project in respect of the requirements of Clause(s) B1 of the Building Code.

The Review is for ☐ All or ☑ Part only of the design work prepared by Gumboots Consulting Engineers
(Design Firm)

as described in ~~drawings~~ report titled "Ground Condition Report 26 Tanekaha Lane, Kerikeri for Tom & Hanneke van Viet

and numbered Gumboots CE 1348a together with the specification, and other documents set out in the schedule attached to this statement according to which the building is proposed to be constructed.

The Review is in respect of the report writing ~~or per attached schedule~~
(aspects of design)

The Review confirms that these aspects of the design are in accordance with: Generally accepted engineering practice

☐ ~~Compliance Documents issued by the Ministry of Business, Innovation & Employment~~ or
(verification method/acceptable solution)

☐ Alternative solution as per the attached schedule

On behalf of the firm undertaking this review, on the basis of the review undertaken, and subject to:

~~(i) Site verification of the following design assumptions~~

(ii) All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that a) the building, if constructed in accordance with the drawings, ~~specifications, and other documents provided or listed in the attached schedule~~, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the review have the necessary competency to do so.

This report and the Building Act

I, Thijs Drupsteen am: ☑ CPEng 66652 # ☐ Reg Arch #
(Name of Design Review Professional)

I am a member of: ☑ Engineering New Zealand ☐ NZIA and hold the following qualifications: BE, CMEng NZ, CPEng, Int P.E.

The Design Review Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than $200,000*.

The Design Review Firm is a member of ACENZ: ☐

SIGNED BY Thijs Drupsteen (Signature) T. Drupsteen
(Name of Design Review Professional)

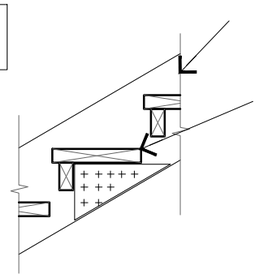
ON BEHALF OF T. Drupsteen CPEng Date 15 June 2025
(Design Review Firm)

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Review Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of $200,000.*

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

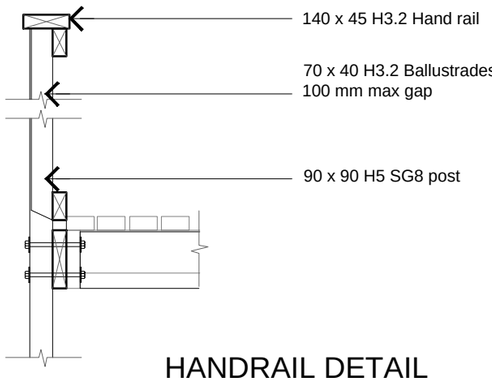
PRODUCER STATEMENT PS2 October 2013 (PDF)

NOTE: ALL DECKS / STAIR TREADS TO BE COATED WITH A PAINT / STAIN / VARNISH IMPREGNATED WITH SAND TO ACHIEVE A SLIP RESISTANCE OF GREATER THAN 0.2 (COMPLIES WITH NZBC D1 TABLE 2)



290 x 45 H3.2 SG8 stair ledger, 2 M12 to each post SS connections with square washers each side
Maz span allowance from NZS3604 2011 is 5.2m

290 x 45 H3.2 tread with 90 x 45 H3.2 stiffener under. Block under tread and router 10mm seating

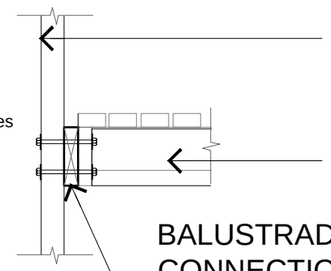


140 x 45 H3.2 Hand rail

70 x 40 H3.2 Ballustrades 100 mm max gap

90 x 90 H5 SG8 post

HANDRAIL DETAIL

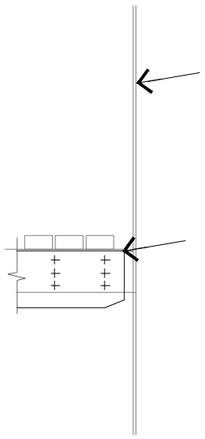


90x 90 H5 post bolted to new boundary and exiting boundary

New 190 x 45 joist beside existing 140 x 45 cantilevered joist. Strap around existing edge beam and under. Fully nail 30mm each side.

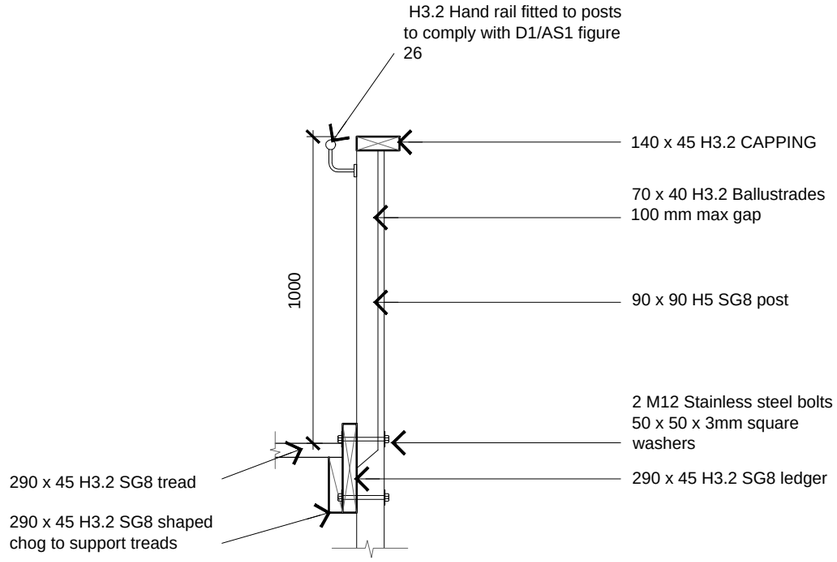
BALUSTRADE CONNECTION

New 190 x 45 boundary beside existing. Bolt together @ 600 crs.
Bolt to each post through existing and propose with 2 M12 S/S bolts.



Existing cladding line

New 190 x 45 joist beside existing 140 x 45 cantilevered joist. Cut back on slope 10° or more. Allow 12mm seperation at end between joist and existing cladding



H3.2 Hand rail fitted to posts to comply with D1/AS1 figure 26

140 x 45 H3.2 CAPPING

70 x 40 H3.2 Ballustrades 100 mm max gap

1000

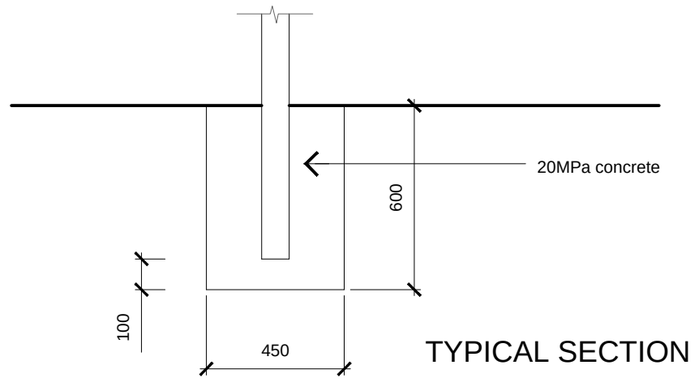
90 x 90 H5 SG8 post

2 M12 Stainless steel bolts 50 x 50 x 3mm square washers

290 x 45 H3.2 SG8 tread

290 x 45 H3.2 SG8 ledger

290 x 45 H3.2 SG8 shaped chog to support treads



20MPa concrete

600

100

450

TYPICAL SECTION

LIVING ARCHITECTURE
Mobile 027 285 5605
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Sheet Title
STAIRS AND LANDINGS

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

Notes
Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office.

Revision	By	Date
Designed	BVV	05-25
Drawn	BVV	05-25
Reviewed		
Approved		

CAD Ref: 100982
Scale (A3 Original): 1:20 @ A3
Project No: 100982
Sheet: A4-01
Revision: A

Table 8.19 – Nailing schedule for hand-driven and power-driven nails (see 8.8.6)

Joint	Hand-driven nails		Power-driven nails	
	Length (mm) **x diameter** (mm) **and type**	**Number/ Location**	**Length** (mm) **x diameter** (mm) **and type**	**Number/ Location**
Bottom plate to floor framing at:				
(a) External walls and internal wall bracing elements	100 x 3.75	2 at 600 mm centres	90 x 3.15	3 at 600 mm centres
(b) Internal walls (may be nailed to floor decking)	100 x 3.75	1 at 600 mm centres	90 x 3.15	1 at 600 mm centres
(c) Trimmer not exceeding 4.2 m long	100 x 3.75	4 (end nailed)	90 x 3.15	6 (end nailed)
Dwang to stud	75 x 3.15 or 100 x 3.75	2 (skewed) 2 (end nailed)	75 x 3.06 90 x 3.15	2 (skewed) 2 (end nailed)
Fishplate to straightened stud	60 x 2.8	4 each side of cut	60 x 2.8	4 (each side of cut)
Half joint in top plate	75 x 3.15	3	75 x 3.06	4
Lintel to trimming stud	75 x 3.15 or 100 x 3.75	4 (skewed) 2 (end nailed)	90 x 3.15	3 (end nailed)
Ribbon board to stud	100 x 3.75	2	90 x 3.15	3
Sill or header trimmer to trimming stud for:				
(a) Trimmer not exceeding 2.4 m long	100 x 3.75	2 (end nailed)	90 x 3.15	3 (end nailed)
(b) Trimmer not exceeding 3.0 m long	100 x 3.75	3 (end nailed)	90 x 3.15	5 (end nailed)
(c) Trimmers not exceeding 3.6 m long	100 x 3.75	4 (end nailed)	90 x 3.15	6 (end nailed)
Solid plaster batten to stud	60 x 2.8 (galv.)	500 mm centres	60 x 2.8 (galv.)	500 mm centres
Stud to plate	75 x 3.15 or 100 x 3.75	4 (skewed) 2 (end nailed)	75 x 3.06 90 x 3.15	4 (skewed) 3 (end nailed)
Top plate 140 mm x 35 mm to 90 mm x 45 mm and top plate to lintel	100 x 3.75	2 at 500 mm centres	90 x 3.15	3 at 500 mm centres
Trimming studs at openings, blocking and studs at wall intersections	100 x 3.75	600 mm centres	90 x 3.15	600 mm centres
Trimming stud to doubled stud immediately under lintel	100 x 3.75	2	90 x 3.15	2
Waling to stud	60 x 2.8	2	60 x 2.8	2

NOTE –
(1) Nail lengths and diameters are the minimum required.
(2) Refer to 4.4 for required protective coatings for metal fasteners.
(3) For studs up to 2.7 in length, 2 / 90 x 3.15 power-driven nails (end nailed) are sufficient.

Table 10.18 – Nailing schedule for hand-driven and power-driven nails (see 10.5.1)

Joint	Hand-driven nails		Power-driven nails	
	Length (mm) **x diameter** (mm) **and type**	**Number/ Location**	**Length** (mm) **x diameter** (mm) **and type**	**Number/ Location**
Roof framing				
Rafter or jack rafter to ridge board or top plate (except skillion roofs) (see 10.2.1.3.7)	See table 10.1	See table 10.1	See table 10.1	See table 10.1
Truss to top plate of external wall	See tables 10.14 and 10.15	See tables 10.14 and 10.15	See tables 10.14 and 10.15	See tables 10.14 and 10.15
Truss to top plate of internal wall	100 x 3.75	2	90 x 3.15	2
Ceiling batten to parallel top plate of internal wall bracing element	75 x 3.15	2 at 400 mm centres	90 x 3.15	2 at 400 mm centres
Collar tie or cleat to rafter	75 x 3.15	4	75 x 3.06	4
Flitches to ridge board and roof members for each side on both joints	60 x 2.8	3	60 x 2.8	3
Hip rafter to top plate	See table 10.1	See table 10.1	See table 10.1	See table 10.1
Underpurlin strut to underpurlin or top plate or strutting beam	100 x 3.75 together with fixing types as set out in table 10.5	2	90 x 3.15 together with fixing types as set out in table 10.5	3
Strutting beam to top plate	See table 10.7	See table 10.7	See table 10.7	See table 10.7
Roof braces at each connection to a framing member:				
(a) 90 mm x 19 mm brace	75 x 3.15	3	75 x 3.15	3
(b) 70 mm x 45 mm brace runner	100 x 3.75	2	90 x 3.15	3
(c) 90 mm x 45 mm brace	100 x 3.75	3	90 x 3.15	5
(d) Steel strip brace				
(i) At ends	60 x 3.15	3	–	–
(ii) Other cases	60 x 3.15	2	–	–
(iii) To ends of braces	–	–	–	–

NOTE –
(1) Nail lengths and diameters are the minimum required.
(2) Refer to 4.4 for required protective coatings for metal fasteners.
(3) Proprietary fixings with the required fixing capacity indicated in the tables may be used.

LIVING ARCHITECTURE
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Sheet Title
NAILING SCHEDULE

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

Notes
Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office.

Revision	By	Date
Designed	BVV	05-25
Drawn	BVV	05-25
Reviewed		
Approved		

CAD Ref: 100982
Scale (A3 Original): NTS @ A3
Project No: 100982
Sheet: A6-01
Revision: A

6.15 NAILING SCHEDULE

Table 6.6 specifies the nails to be used in subfloor *framing*. See 2.4.4 for other requirements for nails.

Table 6.6 – Nailing schedule for hand-driven and power-driven nails

Joint	Hand-driven nails		Power-driven nails	
	Length x diameter and type (mm x mm)	Number/ Location	Length x diameter and type (mm x mm)	Number/ Location
Bearer to jack stud	100 x 3.75	2 (skewed)	90 x 3.15	2 (skewed)
Bearer end to cut between plates	100 x 3.75	4 (skewed)	90 x 3.15	4 (skewed)
Bearer to top plate of wall framing	100 x 3.75	4 (skewed)	90 x 3.15	6 (skewed)
Stud or jack stud to plate	100 x 3.75 or 75 x 3.15	2 (end nailed) 4 (skewed)	90 x 3.15	3 (end nailed)

NOTE –
(1) Nail lengths and diameters are the minimum required.
(2) See 4.4 for required protective coatings for metal fasteners.

Joint	Hand-driven nails		Power-driven nails	
	Length (mm) x diameter (mm) and type	Number/ Location	Length (mm) x diameter (mm) and type	Number/ Location
Floor framing				
Boundary joist to end of each joist	100 x 3.75	2 (end nailed)	90 x 3.15	2 (end nailed)
Curtailed joist not exceeding 3 m long to trimmer	100 x 3.75	3 (end nailed)	90 x 3.15	5 (end nailed)
Curtailed joist to trimmer when half housed	100 x 3.75	2 (end nailed)	90 x 3.15	3 (end nailed)
Flitched joint in joist	100 x 3.75	4 (each end)	90 x 3.15	6 (each end)
Herringbone strutting to joist	60 x 2.8	2 (skewed)	60 x 2.8	2 (skewed)
Joist to plate on foundation walls	100 x 3.75	12 (skewed) per 1.5 m length	90 x 3.15	18 (skewed) per 1.5 m length
Joist to plate or bearer	100 x 3.75	2 (skewed)	90 x 3.15	3 (skewed)
Lapped joint in joist	100 x 3.75	2 (each side)	90 x 3.15	3 (each side)
Solid blocking between joists to plate bearer or stringer	100 x 3.75	4 (skewed)	90 x 3.15	6 (skewed)
Solid blocking to joist	100 x 3.75 or 75 x 3.15	2 (end nailed) 4 (skewed)	90 x 3.15	2 (end nailed)
Flooring				
Sheet decking (not exceeding 21 mm thick): (a) Supports at sheet edges	60 x 3.06 ring shanked galv. or 60 x 2.8	150 mm centres	60 x 2.8 ring shanked galv.	150 mm centres
(b) Intermediate supports		300 mm centres		300 mm centres
Strip flooring not exceeding 75 mm wide to floor joist	2½ x finished thickness	1	–	1
Strip flooring not exceeding 100 mm wide to floor joist	2½ x finished thickness	2	–	2

NOTE –
(1) Nail lengths and diameters are the minimum required.
(2) See 4.4 for required protective coatings for metal fasteners.

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Sheet Title
NAILING SCHEDULE

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

Notes
Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office.

Revision	By	Date
Designed	BVV	05-25
Drawn	BVV	05-25
Reviewed		
Approved		

CAD Ref: 100982
Scale (A3 Original): NTS @ A3
Project No: 100982
Sheet: A6-02
Revision: A

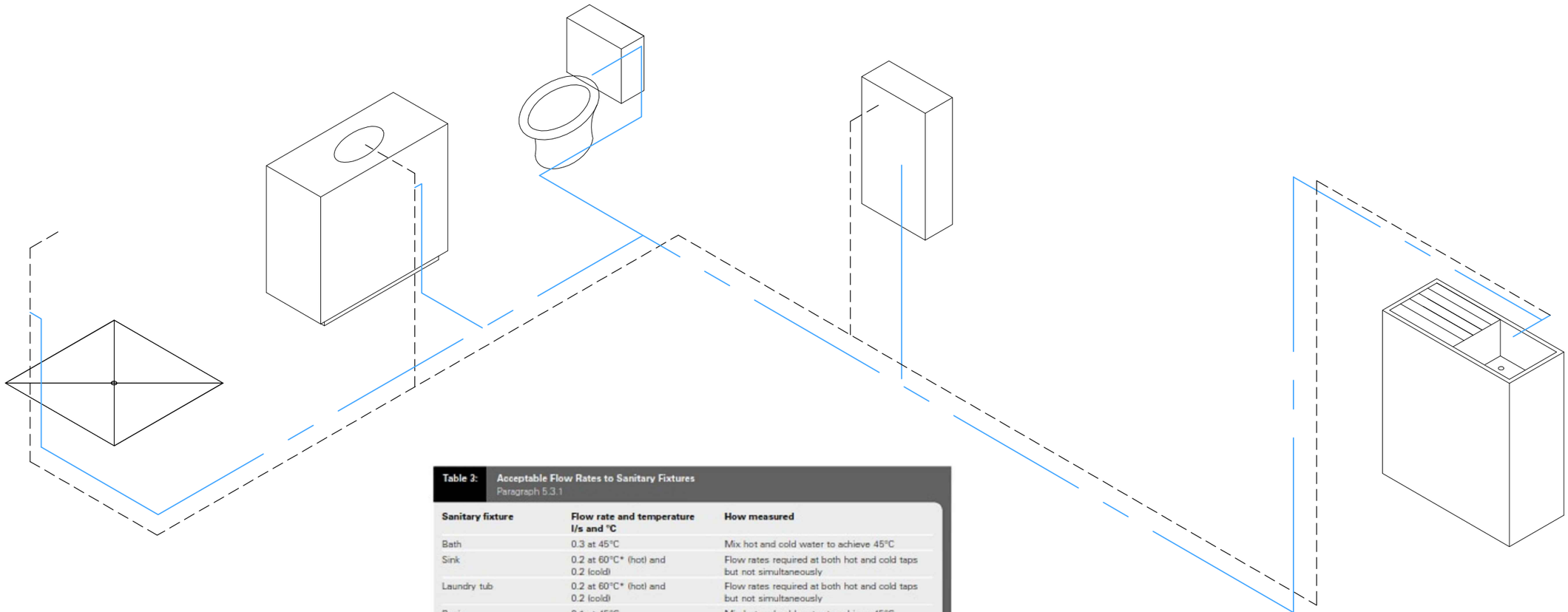

Table 3: Acceptable Flow Rates to Sanitary Fixtures
Paragraph 5.3.1

Sanitary fixture	Flow rate and temperature l/s and °C	How measured
Bath	0.3 at 45°C	Mix hot and cold water to achieve 45°C
Sink	0.2 at 60°C* (hot) and 0.2 (cold)	Flow rates required at both hot and cold taps but not simultaneously
Laundry tub	0.2 at 60°C* (hot) and 0.2 (cold)	Flow rates required at both hot and cold taps but not simultaneously
Basin	0.1 at 45°C	Mix hot and cold water to achieve 45°C
Shower	0.1 at 42°C	Mix hot and cold water to achieve 42°C

* The temperatures in this table relate to the temperature of the water used by people in the daily use of the *fixture*.

Note:

The flow rates required by Table 3 shall be capable of being delivered simultaneously to the kitchen sink and one other *fixture*.

Table 4: Tempering Valve and Nominal Pipe Diameters
Paragraphs 5.3.1 and 6.12.1

	Low pressure (i.e. header tank supply or low pressure)	Low and medium pressure unvented (valve vented) and open vented	Mains pressure
Pressure of water at tempering valve (kPa)	20 – 30	30 – 120	over 300
Metres head (m)	2 – 3	>3 – 12	over 30
Minimum tempering valve size	25 mm	20 mm	15 mm
Pipes to tempering valve	25 mm (see **Note 3**)	20 mm	20 mm (15 mm optional) (see **Note 1**)
Pipes to shower	20 mm	20 mm (see **Note 4**)	20 mm (see **Note 5**) (15 mm optional) (see **Note 1**)
Pipes to sink/laundry (see **Note 2**)	20 mm	20 mm	15 mm
Pipes to bath (see **Note 2**)	20 mm	20 mm	15 mm
Pipes to basins (see **Note 2**)	15 mm	15 mm	10 mm

Notes:

1. If supplied by separate pipe from *storage water heater* to a single outlet.
2. This table is based on maximum pipe lengths of 20 metres.
3. 2 m maximum length from *water heater* outlet to tempering valve.
4. 15 mm if dedicated line to shower.
5. 10 mm if dedicated line to shower.
6. Table 3 pipe sizes have been calculated to deliver water simultaneously to the kitchen sink and one other *fixture*.

Amd
Feb

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Sheet Title
PLUMBING SCHEMATIC

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

Notes
Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer all discrepancies to the drawing office.

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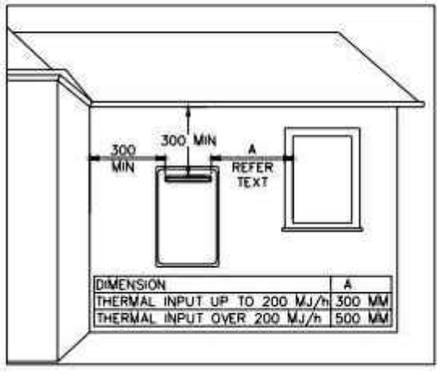
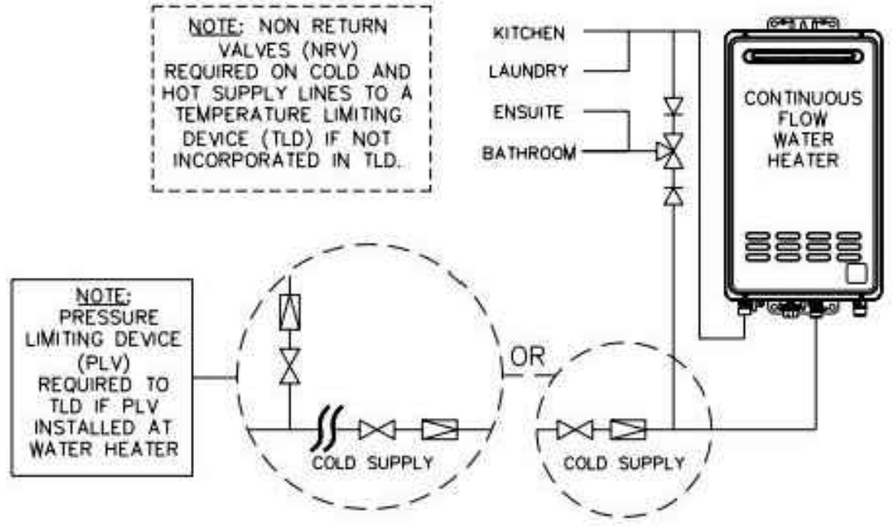
Approved		

CAD Ref: 100982
Scale (A3 Original): NTS @ A3
Project No: 100982
Sheet: A6-04
Revision: A

As a guide the following requirements extracted from the New Zealand Gas Installations Standard must be observed.

- At least 300 mm between the top of the flue terminal and the eaves.
- At least 300 mm (024) or 500 mm (027) between the flue terminal and the edge of any opening into the building, measured horizontally along the wall.
- At least 300 mm between the flue terminal and a return wall or external corner, measured horizontally along the wall.
- At least 1500 mm between the top of the flue terminal and below any openable window measured vertically.
- At least 1500 mm between the flue terminal and any opening into a building, in the direction of the flue discharge.
- At least 500 mm between the flue terminal and a fence, wall or other obstruction, in the direction of the flue discharge.





Two Temperature Zones Using a Temperature Limiting Device

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Sheet Title
GAS CALIFONT

Project Title
VAN VLIET
RELOCATABLE HOUSE
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KAPIRO

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Approved		

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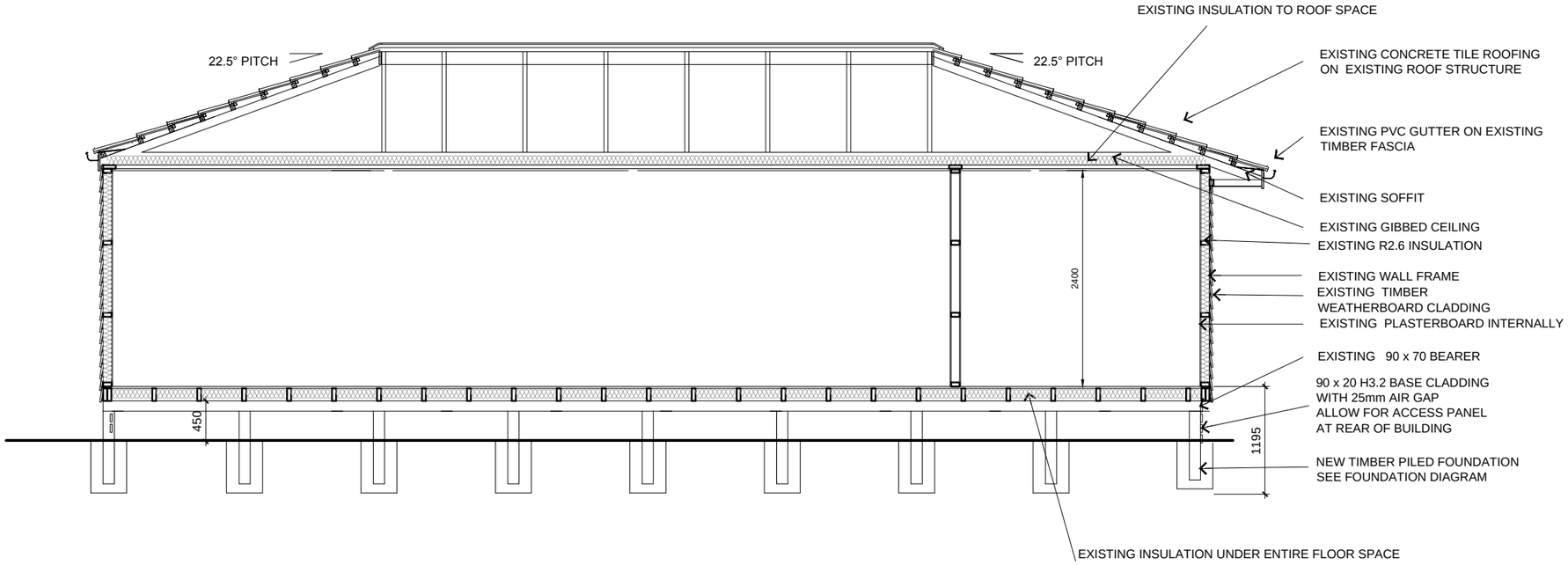
100982	NTS @ A3
Project No	**Sheet** / **Revision**
100982	A6-03 / A



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Sheet Title
SECTION BB

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

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Approved		

CAD Ref	Scale (A3 Original)	
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Project No	**Sheet**	**Revision**
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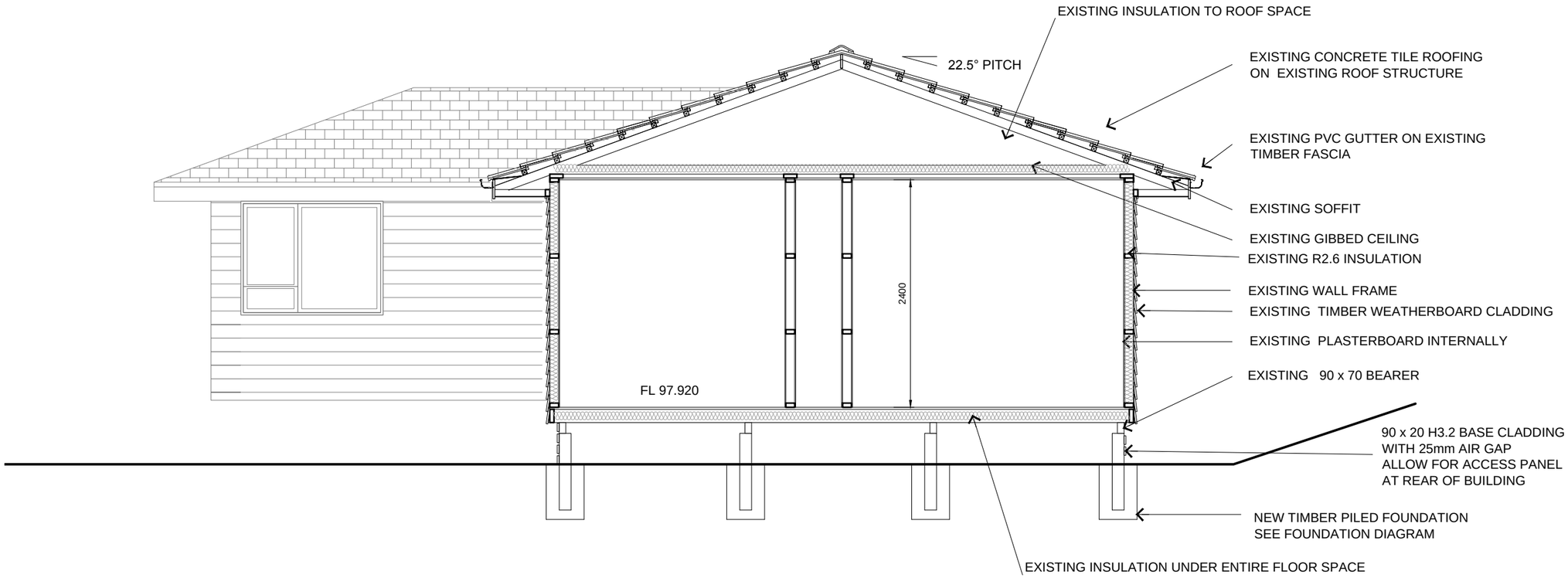

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Sheet Title
SECTION AA

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

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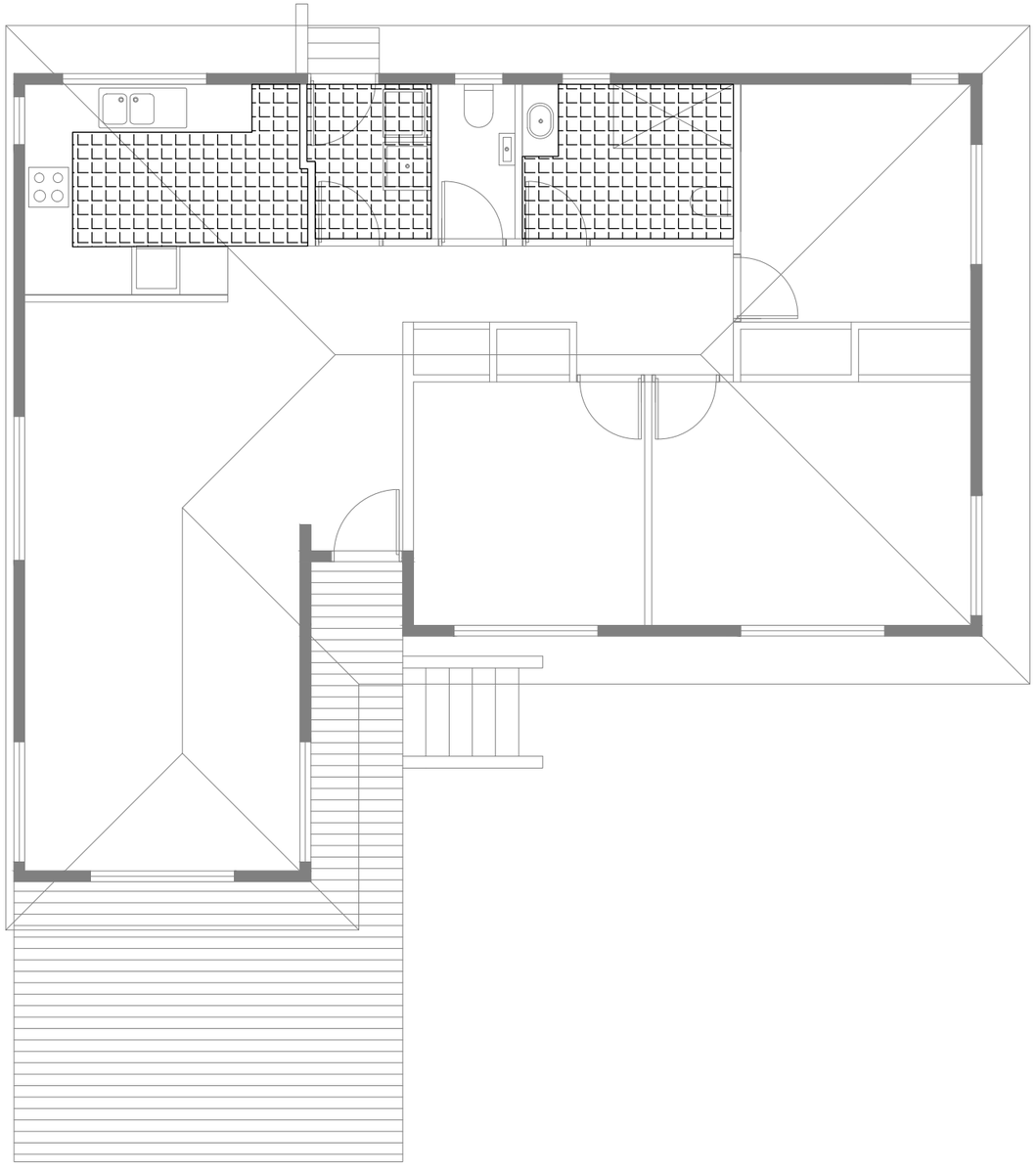
100982	1:50 @ A3	
Project No	**Sheet**	**Revision**
100982	A3-01	A

WET FLOOR AREA COVING TO WALLS



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Sheet Title
WET WALL AREAS
MAIN HOUSE

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

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Approved		

CAD Ref	Scale (A3 Original)	
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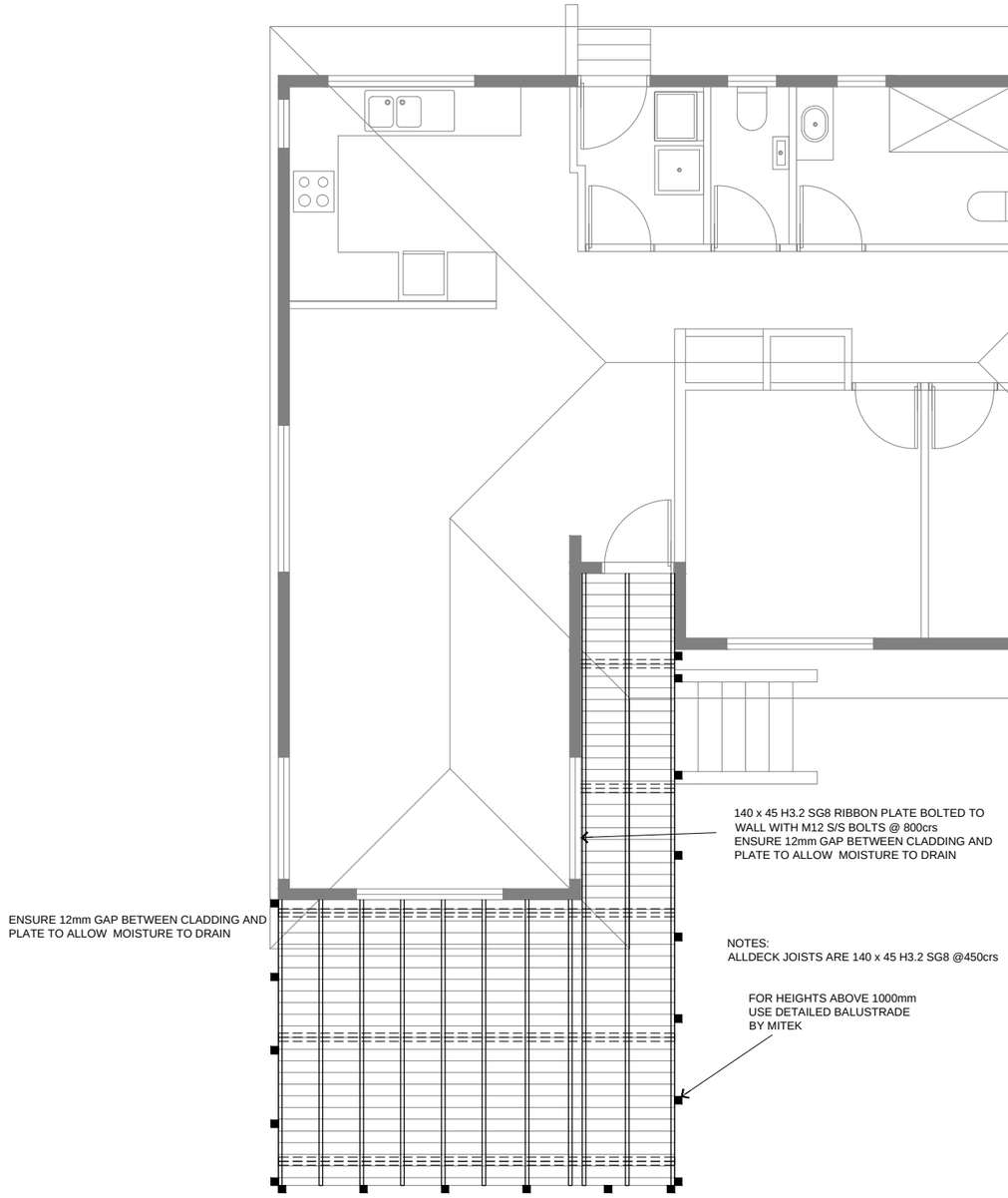
Project No	Sheet	Revision
100982	A2-07	A



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Sheet Title
PROPOSED DECK JOIST LAYOUT
MAIN HOUSE

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

Notes
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Approved		

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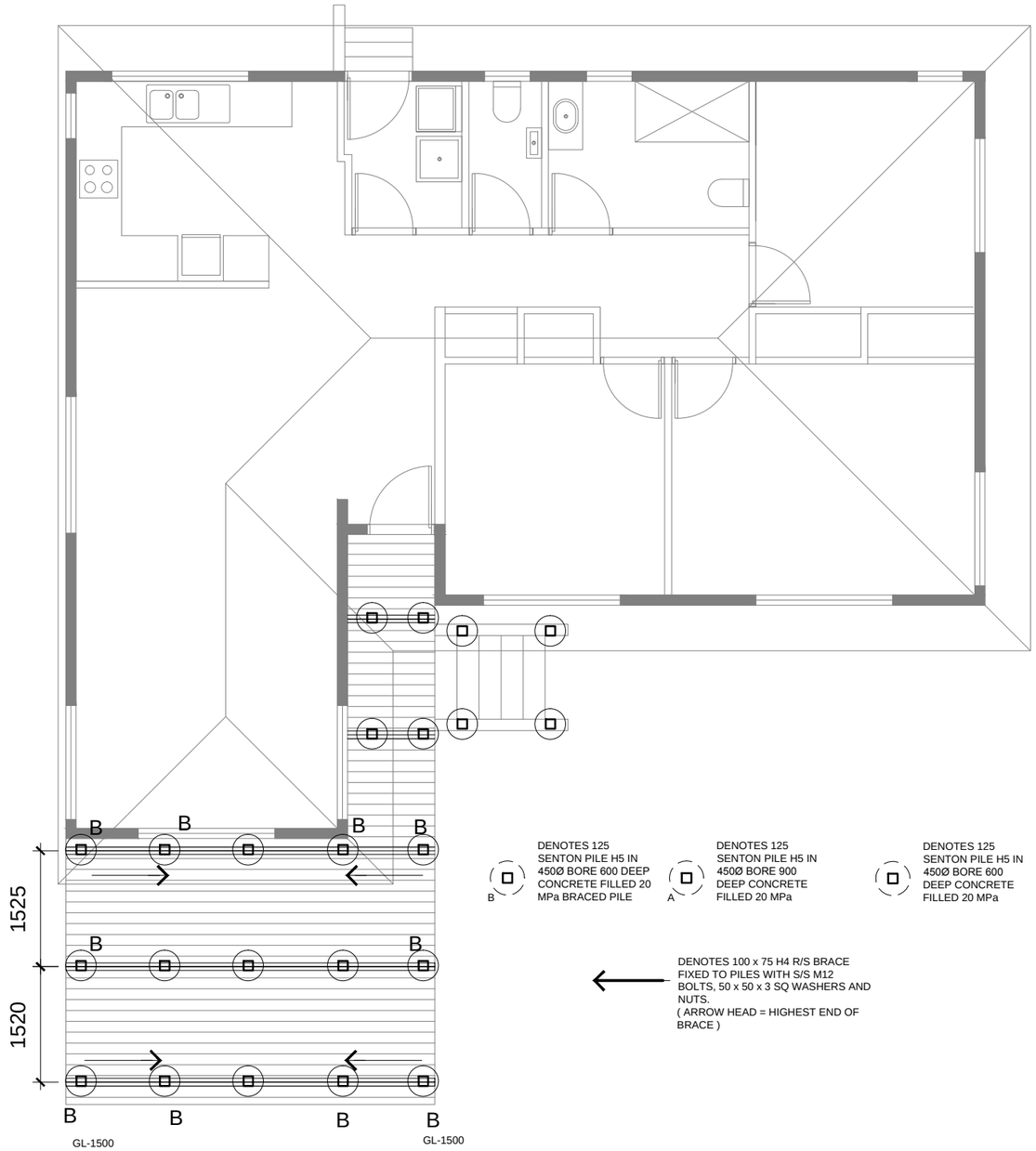
Project No	Sheet	Revision
100982	A2-06	A



B DENOTES 125 SENTON PILE H5 IN 450Ø BORE 600 DEEP CONCRETE FILLED 20 MPa BRACED PILE

A DENOTES 125 SENTON PILE H5 IN 450Ø BORE 900 DEEP CONCRETE FILLED 20 MPa

DENOTES 125 SENTON PILE H5 IN 450Ø BORE 600 DEEP CONCRETE FILLED 20 MPa

DENOTES 100 x 75 H4 R/S BRACE FIXED TO PILES WITH S/S M12 BOLTS, 50 x 50 x 3 SQ WASHERS AND NUTS.
(ARROW HEAD = HIGHEST END OF BRACE)

NOTES:
ALL BEARERS TO HAVE MAXIMUM SPACING OF PILES TO BE 1300 IN BETWEEN PILES

NOTES:
ALLDECK BEARERS ARE 2/140 x 45 H3.2 SG8

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Sheet Title
PROPOSED DECK SUBFLOOR
MAIN HOUSE

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

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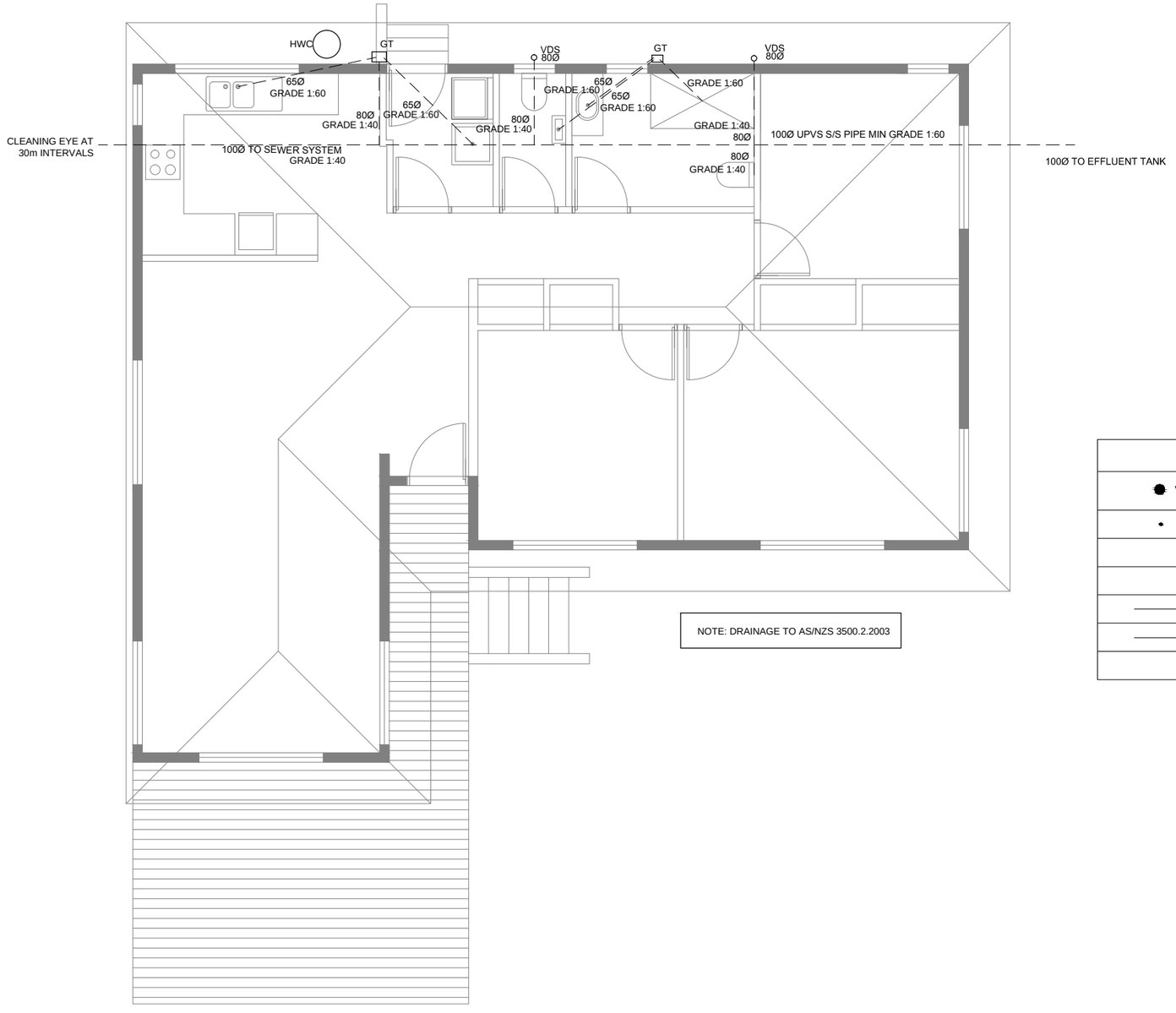
100982	1:75 @ A3	
Project No	Sheet	Revision
100982	A2-05	A



Waste Pipe Gradients (min)		
40Ø	1:40 Minimum Gradiant	4DU
65Ø	1:40 Minimum Gradiant	21DU
100Ø	1:60 Minimum Gradiant	115DU
Waste Pipe & Discharge Units		
40Ø	Hand basin	1DU
40Ø	Kitchen Sink	3DU
40Ø	Dishwasher	3DU
40Ø	Laundry Tub	3DU
40Ø	Washing Machine	5DU
40Ø	Shower	2DU
40Ø	Bath	4DU
100Ø	WC Pan	4DU
Drainage Pipe Gradient		
65Ø	1:40 Minimum Gradiant	25DU
85Ø	1:60 Minimum Gradiant	61DU
100Ø	1:60 Minimum Gradiant	205DU
150Ø	1:60 Minimum Gradiant	1310DU

Plumbing Legend	
VDS	Vent Discharge Stack
DS	Discharge Stack
	Air Admittance Valve
	Inspection Joint
	Drainage - Waste Pipe
	Vent Pipe
GT	Gulley Trap

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Sheet Title
DRAINAGE PLAN
MAIN HOUSE

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

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Approved		

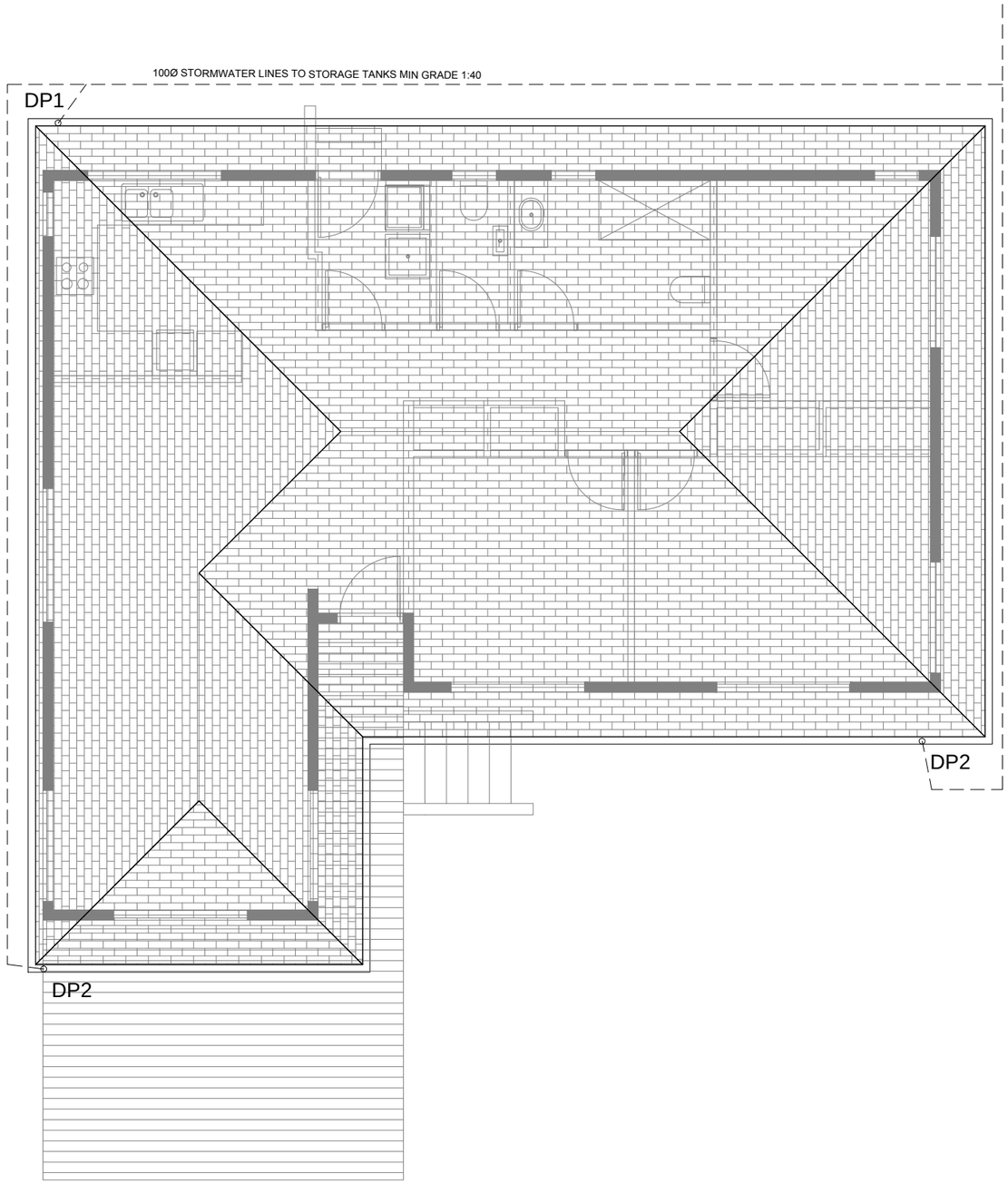
CAD Ref 100982

Scale (A3 Original) 1:75 @ A3

Project No 100982

Sheet A2-04

Revision A



Roof

Fall 22.5°

Storm water calculations:

Roof Gutter type- 100 Customline gutter
Cross-sectional Area - 6000 mm²
Roof Area serviceable;- 50m²
Ref E1/AS1 Table 5

Roof Area A= 118 m²
Downpipe size = **3** x A1 Downpipes 80Ø
Ref E1/AS1 Table 5

Rainfall Intensity= 115mm/hr
Ref E1/AS1 Appendix A

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Sheet Title
ROOF CATCHMENT PLAN
MAIN HOUSE

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
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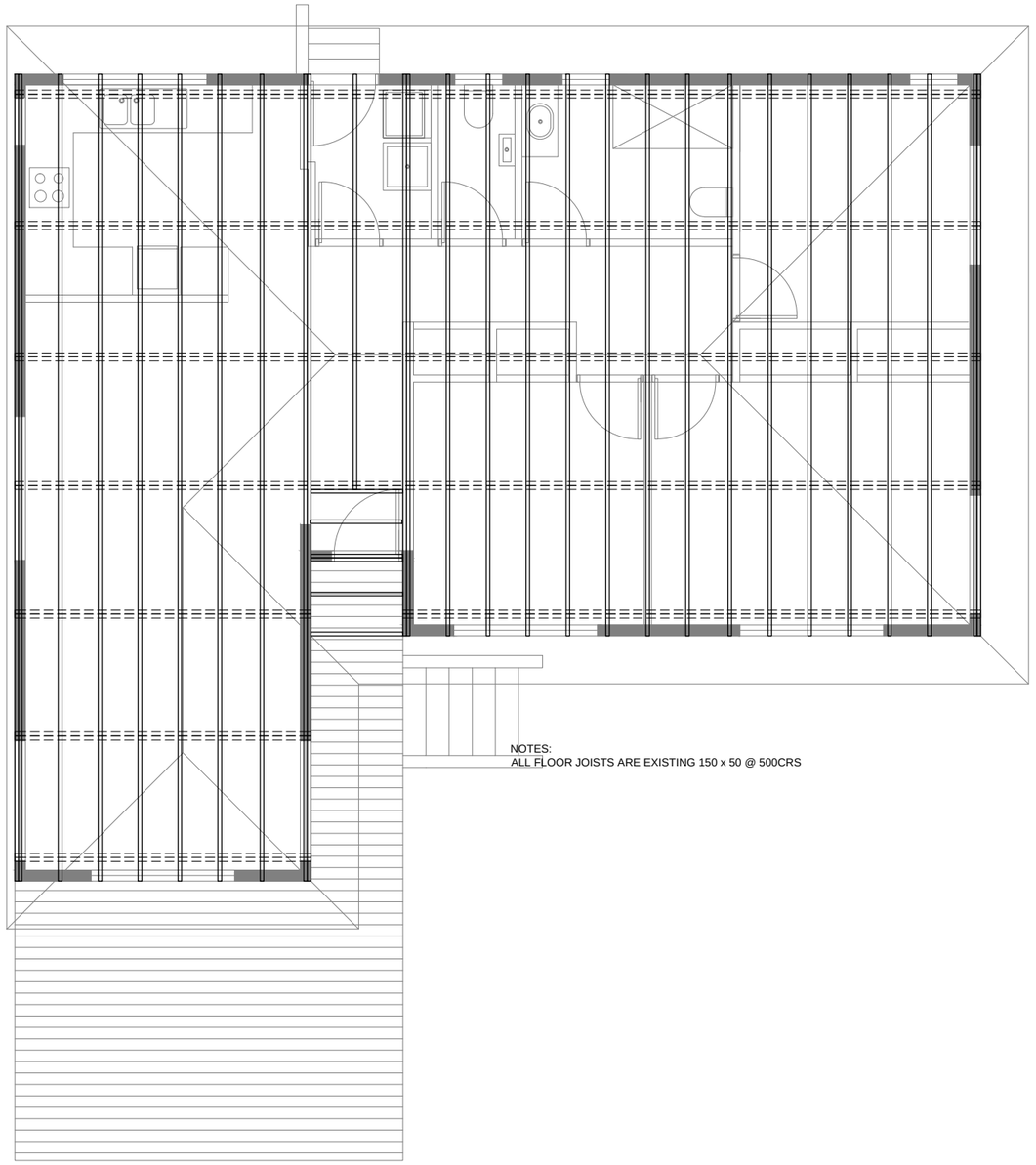
100982	1:75 @ A3
Project No	**Sheet** / **Revision**
100982	A2-03 / A



NOTES:
ALL BEARERS 90 x 70 H3.2 TO REMAIN IN PLACE

NOTES:
ALL FLOOR JOISTS ARE EXISTING 150 x 50 @ 500CRS

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Sheet Title
JOIST PLAN
MAIN HOUSE

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VAN VLIET
RELOCATABLE HOUSE
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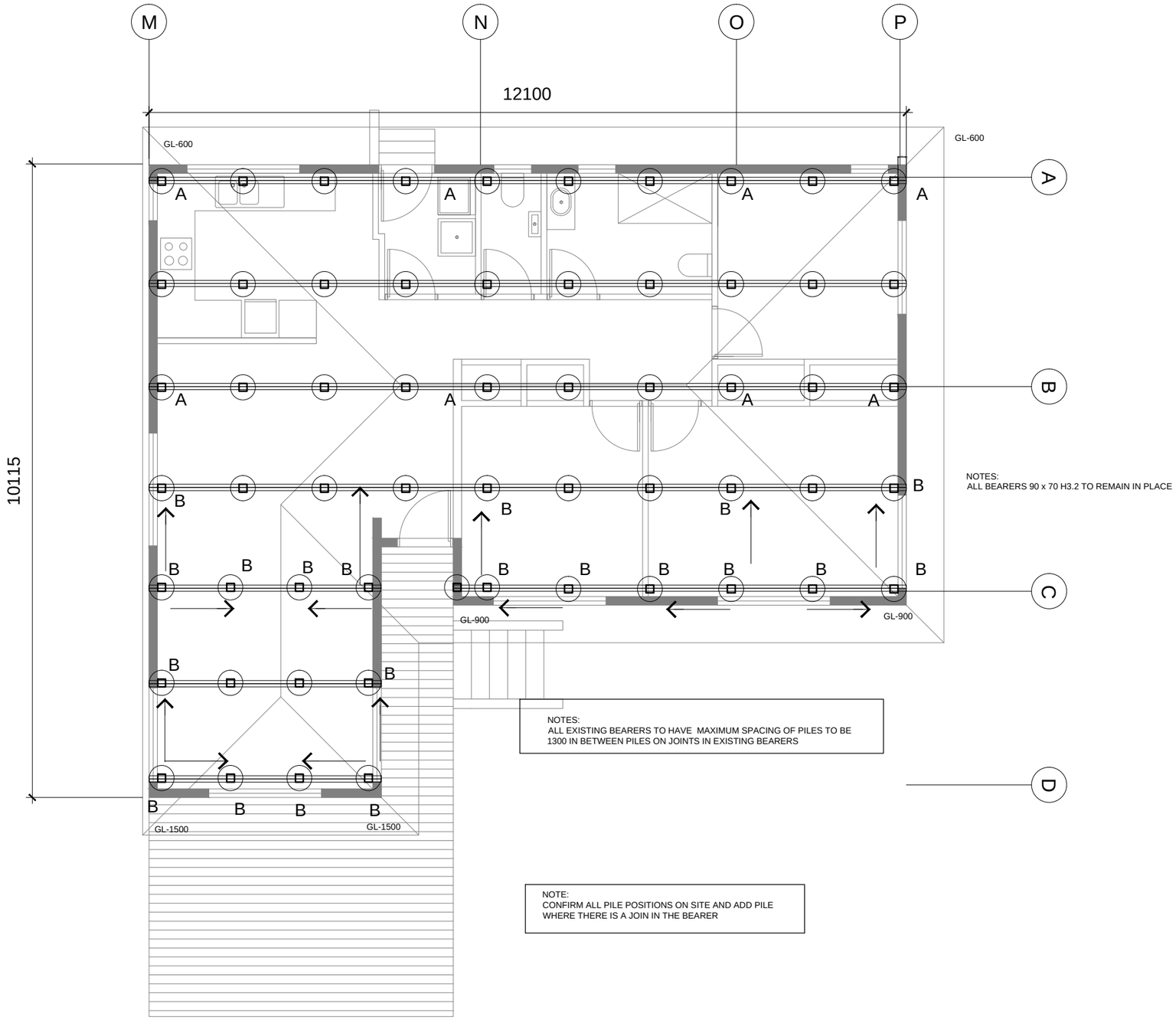

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Sheet Title
SUBFLOOR PLAN

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

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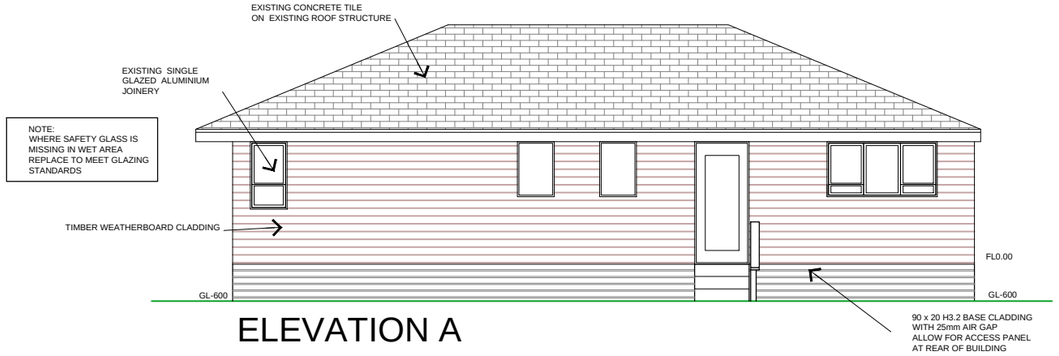
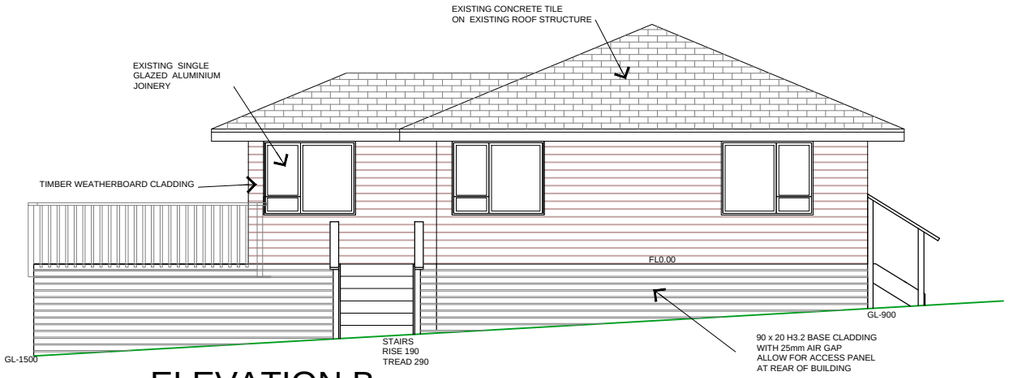


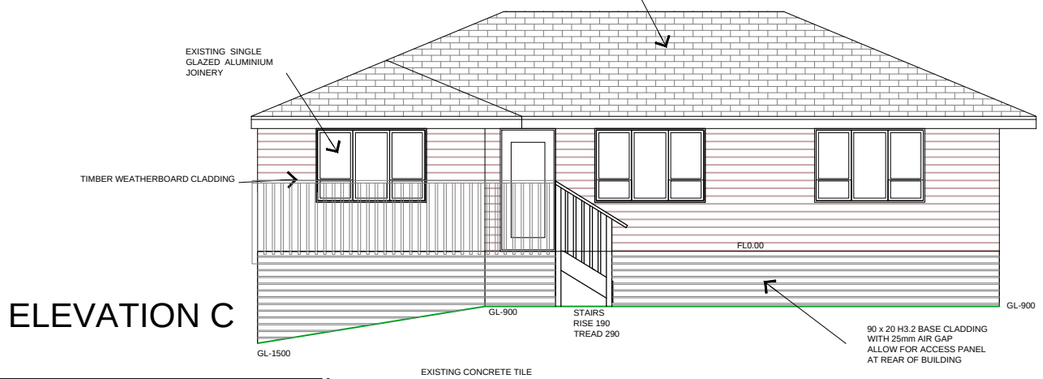
ELEVATION A

RISK MATRIX ASSESSMENT					
Risk Factor:	Low	Medium	High	Very High	Score
A. Wind Zone	0	0	1	2	1
B. Number of Storeys	0	1	2	4	0
C. Roof / Wall Intersection Design	0	1	3	5	0
D. Eave Width	0	1	2	5	1
E. Envelope Complexity	0	1	3	6	0
F. Deck Design	0	2	4	6	0
					2
Cladding Types: EXISTING TIMBER WEATHERBOARD CLADDING DIRECT FIXED					



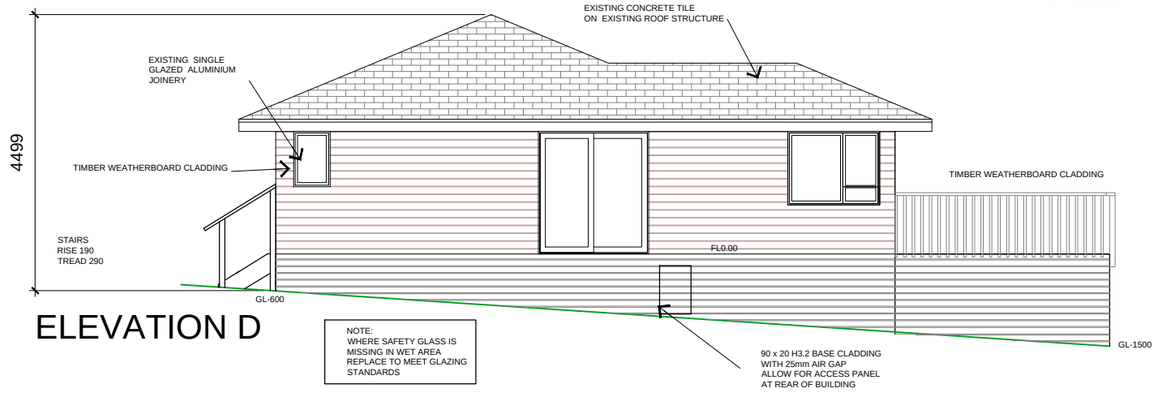
ELEVATION B

RISK MATRIX ASSESSMENT					
Risk Factor:	Low	Medium	High	Very High	Score
A. Wind Zone	0	0	1	2	1
B. Number of Storeys	0	1	2	4	0
C. Roof / Wall Intersection Design	0	1	3	5	0
D. Eave Width	0	1	2	5	1
E. Envelope Complexity	0	1	3	6	0
F. Deck Design	0	2	4	6	0
					2
Cladding Types: EXISTING TIMBER WEATHERBOARD CLADDING DIRECT FIXED					



ELEVATION C

RISK MATRIX ASSESSMENT					
Risk Factor:	Low	Medium	High	Very High	Score
A. Wind Zone	0	0	1	2	1
B. Number of Storeys	0	1	2	4	0
C. Roof / Wall Intersection Design	0	1	3	5	0
D. Eave Width	0	1	2	5	1
E. Envelope Complexity	0	1	3	6	0
F. Deck Design	0	2	4	6	0
					2
Cladding Types: EXISTING TIMBER WEATHERBOARD CLADDING DIRECT FIXED					



ELEVATION D

RISK MATRIX ASSESSMENT					
Risk Factor:	Low	Medium	High	Very High	Score
A. Wind Zone	1	2	1	0	0
B. Number of Storeys	0	4	2	1	0
C. Roof / Wall Intersection Design	0	5	3	1	0
D. Eave Width	5	5	2	1	0
E. Envelope Complexity	0	6	3	1	0
F. Deck Design	0	6	4	2	0
	6				
Cladding Types: EXISTING TIMBER WEATHERBOARD CLADDING DIRECT FIXED					

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Sheet Title
EXISTING ELEVATIONS
MAIN HOUSE

Project Title
VAN VLIET
RELOCATABLE HOUSE
TANEKAHA LANE
KAPIRO

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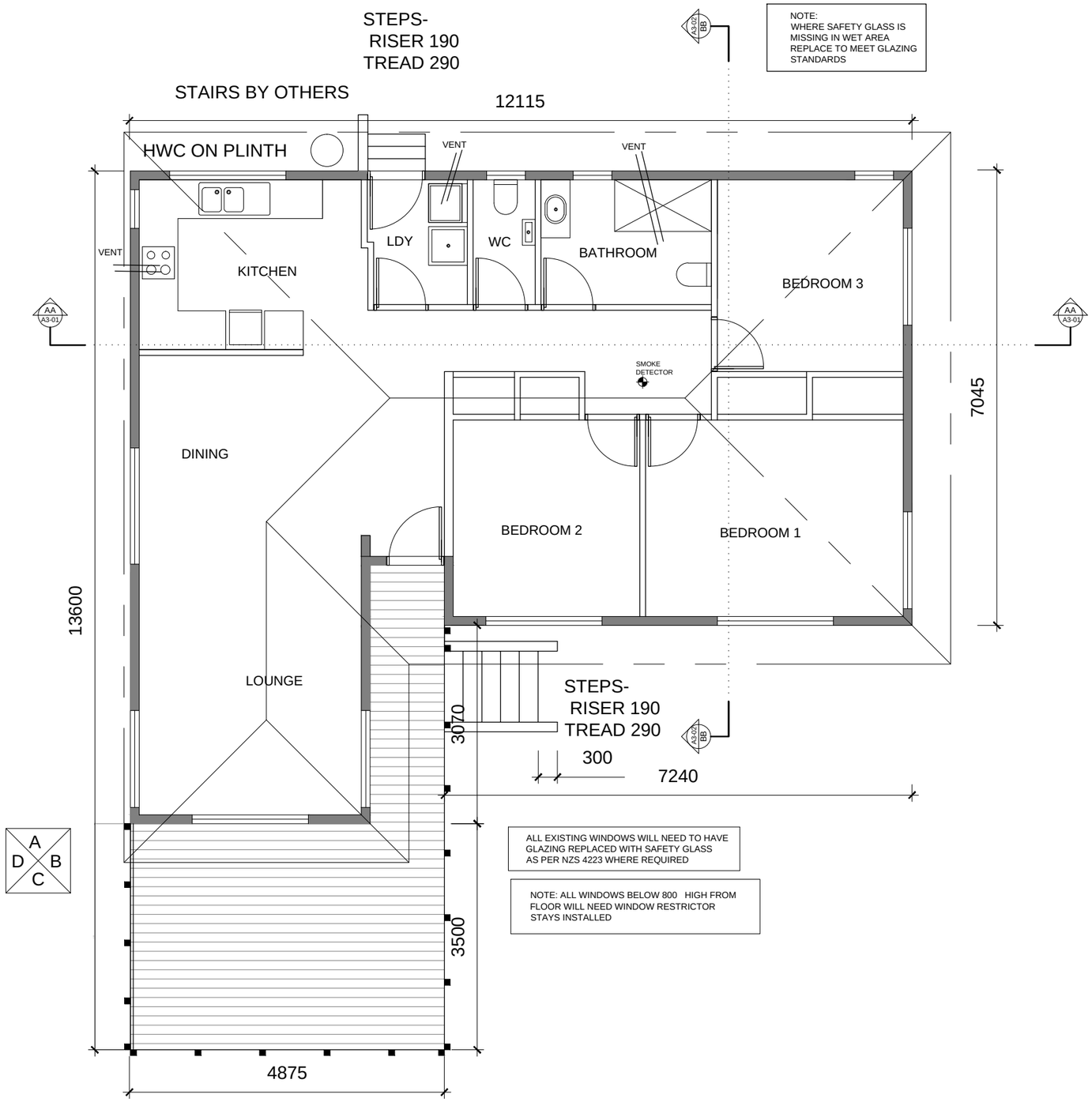
100982	1:100 @ A3
Project No	Sheet / Revision
100982	A1-02 / A



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Sheet Title
EXISTING PLAN
MAIN HOUSE

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VAN VLIET
RELOCATABLE HOUSE
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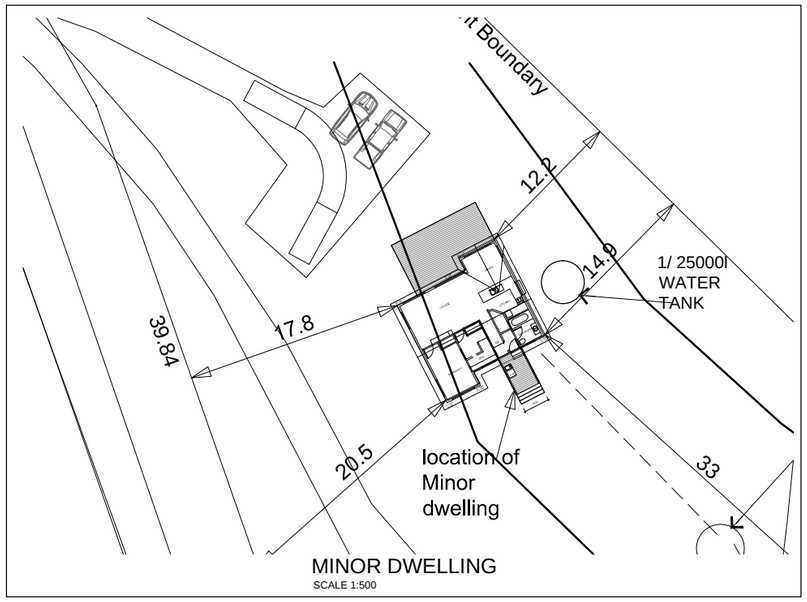
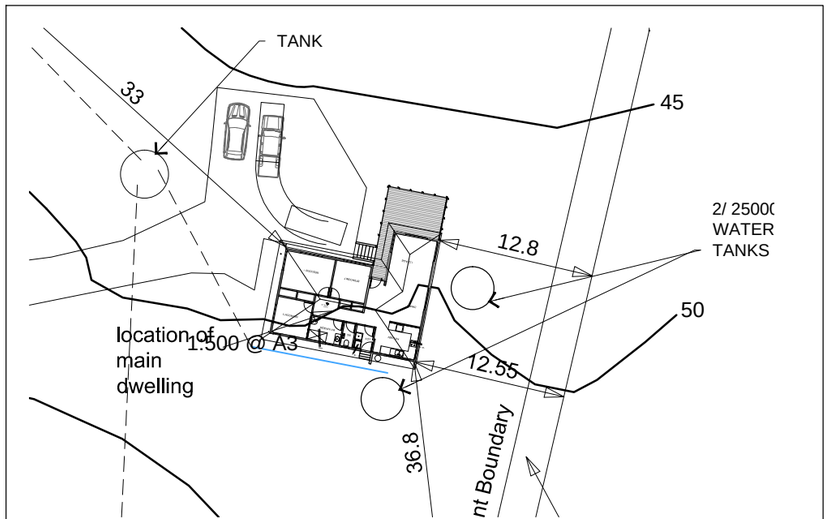
Approved		

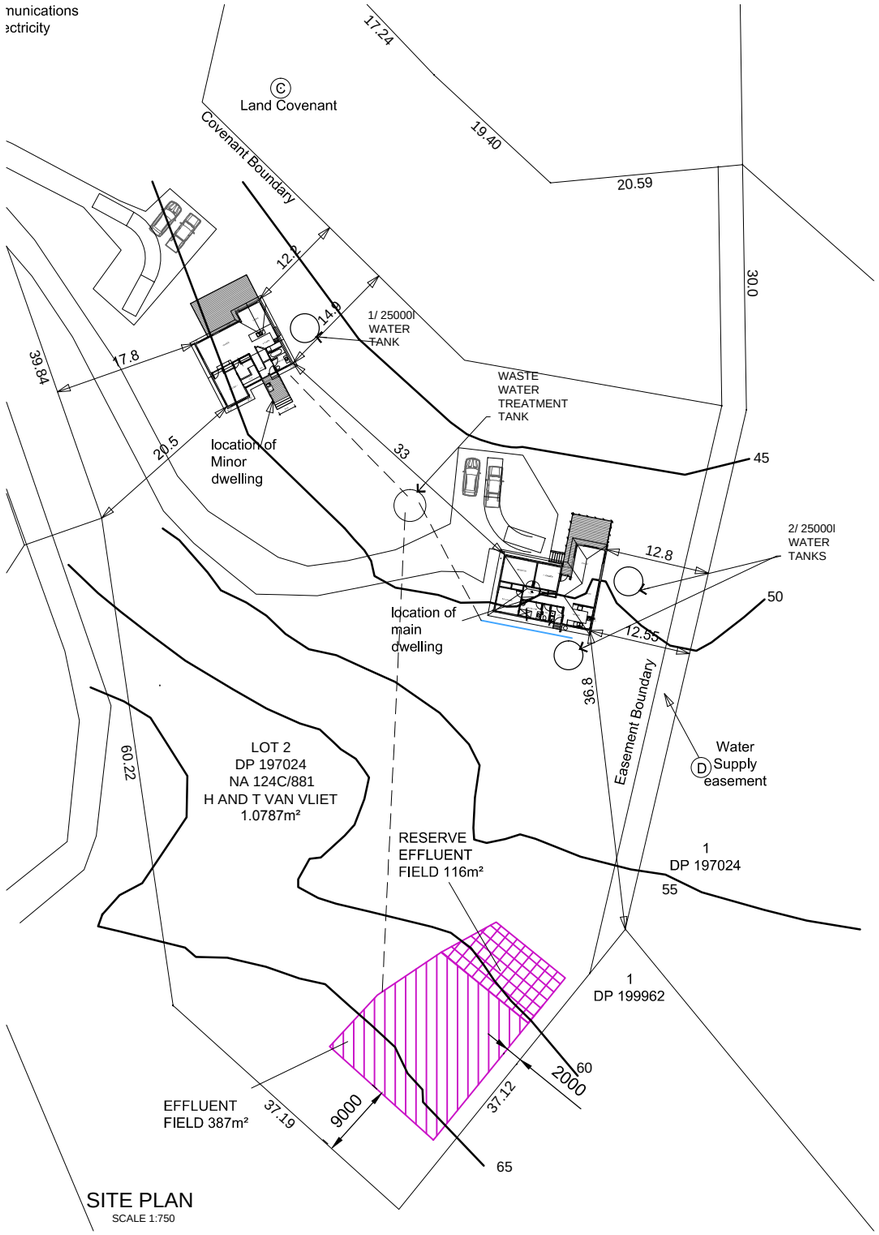
CAD Ref	Scale (A3 Original)
100982	1:75 @ A3
Project No	**Sheet** / **Revision**
100982	A1-01 / A



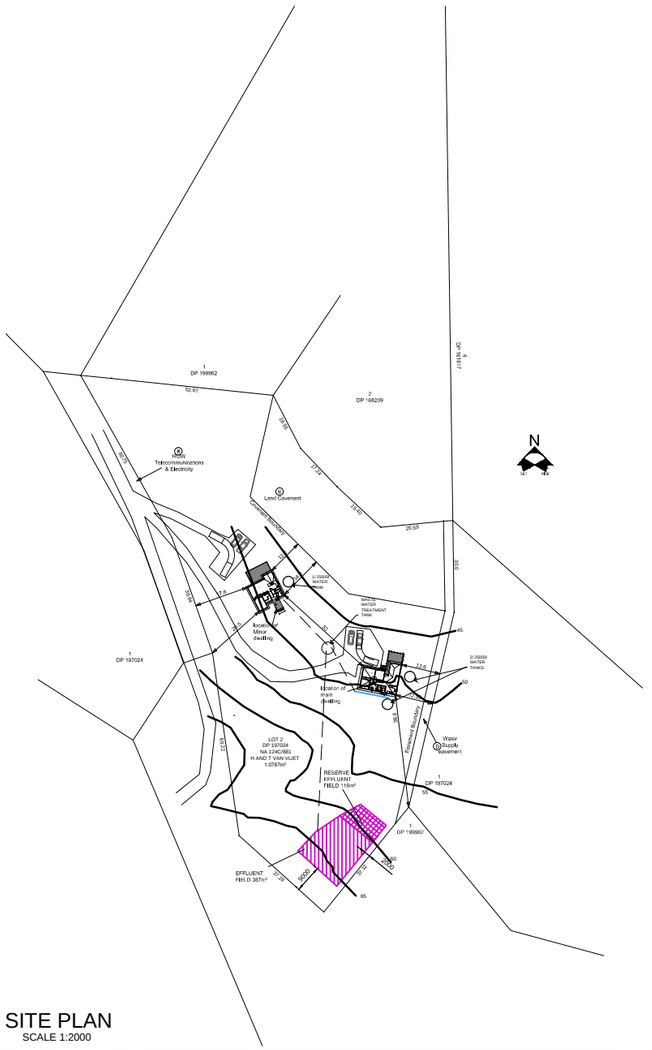
MINOR DWELLING
SCALE 1:500



MAIN HOUSE
SCALE 1:500



SITE PLAN
SCALE 1:750



SITE PLAN
SCALE 1:2000

DRONE PHOTO

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Notes

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Revision	By	Date	CAD Ref	Scale (A3 Original)	
Designed	BVV	07-25	100982	1:2000 @ A3	
Drawn	BVV	07-25			
Reviewed			Project No	Sheet	Revision
Approved			100982	A0-01	A