Far North District Council

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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 Form 9)

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 O Fast Track Land Use* O Subdivision O Discharge

O Extension of time (s.125) O Change of conditions (s.127) O Change of Consent Notice (s.221(3))

O Consent under National Environmental Standard (e.g. Assessing and Managing Contaminants in Soil)

O Other (please specify) _____

***The fast track for simple land use consents is restricted to consents with a controlled activity status and requires you provide an electronic address for service.**

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

Yes / No

4. Applicant Details:

Name/s: Andrew and Tina Syme

Electronic Address for Service (E-mail): [redacted]

Phone Numbers:

Postal Address: (*or* alternative method of service under section 352 of the Act)

_____ Post Code: _____

5. Address for Correspondence: *Name and address for service and correspondence (if using an Agent write their details here).*

Name/s: Bay of Islands Planning

Electronic Address for Service (E-mail): [redacted]

Phone Numbers:

Postal Address: (*or* alternative method of service under section 352 of the Act)

_____ Post Code: _____

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

6. **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: Andrew and Tina Syme

Property Address/: Location: 23 Koropewa Road
Kerikeri

7. **Application Site Details:**

Location and/or Property Street Address of the proposed activity:

Site Address/ Location: 23 Koropewa Road
Kerikeri

Legal Description: Lot 1 DP 168917 Val Number:

Certificate of Title: NA103A/113

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

Site Visit Requirements:

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

Is there a dog on the property? (Yes) / No

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

Please contact the applicant on ..... prior to visiting the site

[redacted]

8. **Description of the Proposal:**

Please enter a brief description of the proposal here. Attach a detailed description of the proposed activity and drawings (to a recognized scale, e.g. 1:100) to illustrate your proposal. Please refer to Chapter 4 of the District Plan, and Guidance Notes, for further details of information requirements.

Second dwelling on the property at 23 Koropewa Road, Kerikeri

purpose of property is for aging parents to move on site for long term support.

If this is an application for an Extension of Time (s.125); Change of Consent Conditions (s.127) or 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) or extension being sought, with reasons for requesting them.

9. **Would you like to request Public Notification** Yes/No

10. Other Consent required/being applied for under different legislation (more than one circle can be ticked):

O Building Consent (BC ref # if known)

O Regional Council Consent (ref # if known)

O National Environmental Standard consent

O Other (please specify)

11. 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 (further information in regard to this NES is available on the Council's planning web pages):

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 O no O don't know

Is the proposed activity an activity covered by the NES? (If the activity is any of the activities listed below, then you need to tick the 'yes' circle). — O yes ⊗ no O don't know

O Subdividing land

O Changing the use of a piece of land

O Disturbing, removing or sampling soil

O Removing or replacing a fuel storage system

12. 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.

Please attach your AEE to this application.

13. 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 all names in full) WB e SC Boyle c/o Genez family Trust

Email: [redacted]

Postal Address: [redacted]

Phone Numbers: [redacted]

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: [redacted] (please print)

Signature [redacted] (signature of bill payer – **mandatory**) Date: 4/7/2024

14. 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.

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

Name: Bettina Symes (please print)

Signature: [redacted] (signature) Date: 4/7/2024

(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)
- ○ 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.

Only one copy of an application is required, but please note for copying and scanning purposes, documentation should be:

UNBOUND **SINGLE SIDED** **NO LARGER THAN A3 in SIZE**

BAY OF ISLANDS PLANNING (2022) LIMITED

Kerikeri House
Suite 3, 88 Kerikeri Road
Kerikeri

Email – office@bayplan.co.nz Website - www.bayplan.co.nz

8 July 2024

Dear Team Leaders,

Re: Proposed Second Dwelling at the scale of a Minor Residential Unit (**MRU**) – 23 Koropewa Road, Kerikeri

Our clients, Andrew and Tina Syme seek a resource consent to establish a second dwelling at 23 Koropewa Road, Kerikeri. The site is zoned Rural Production within the Far North District Council Operative District Plan (**ODP**), and Horticulture zone under the Proposed District Plan (**PDP**).

Resource Consent is required as the property already has an established principal dwelling and while the dwelling can meet all criteria for a MRU, the site is under 5,000m^2 so technically the application is for a second dwelling. No consents are required under the PDP.

Overall, the application is a **Non-complying Activity.**

Please do not hesitate to contact me should you require any further information.

[redacted]

Yours sincerely,
Andrew McPhee
Consultant Planner

Reviewed
Steven Sanson
Consultant Planner

1. INTRODUCTION

The applicants, Andrew and Tina Syme seek resource consent to establish a one bedroom dwelling commensurate in size and location to a MRU at 23 Koropewa Road, Kerikeri. The site is legally described as Lot 1 DP 168917 with an area of 3905m2. A copy of the Certificate of Title is attached within **Appendix A**.

The proposed dwelling is supported by a site plan and development drawings produced by O'Brien Design Consulting, attached at **Appendix B**. A Stormwater Mitigation Report has also been prepared by Wilton Joubert which is attached at **Appendix C**.

2. SITE DESCRIPTION

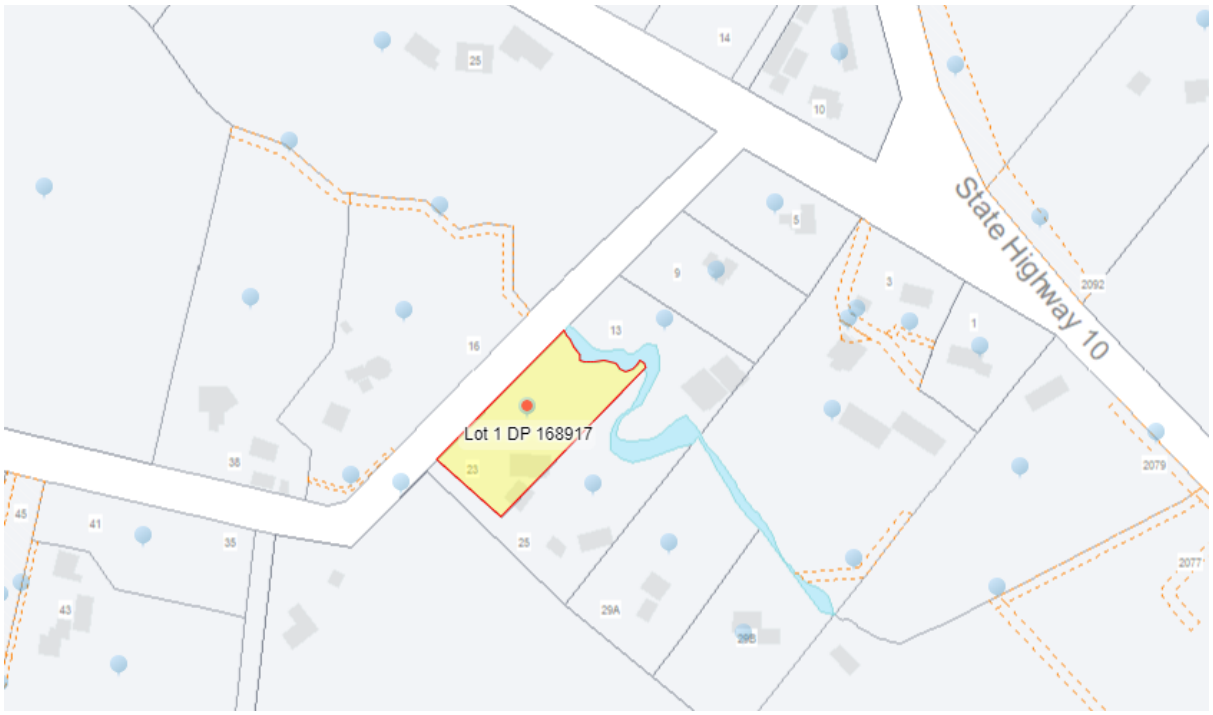


Figure 1 – Site (Source: Prover)

Figure 2 – Site Aerial (Source: Google Earth)

The application site is located on the southeastern side of Koropewa Rd, approximately 120 metres south of the intersection with Pungaere Road. There is an existing access to the property off Koropewa Road via a gravel driveway from the southwest corner of the site. The site comprises a total land area of 3,905m2, which can be described as generally sloping toward the northeast.

The land area is relatively small when considered from a zoning perspective, however the surrounds also reflect similar sized Rural Production allotments in terms of size and use [rural lifestyle].

The site is bordered on the southern boundary by the ROW access for 25, 29A and 29B Koropewa Road. The property on the other side of the ROW access (29C Koropewa Road) is the location of the Makaira Boats factory. On all other boundaries the site is surrounded by similar size sections used in a rural lifestyle capacity.

The site has an existing dwelling located on the southern portion of the property with an existing shed and one-bedroom sleepout. There are two existing stormwater tanks water tanks east of the existing shed and one bedroom sleepout. The existing septic tank servicing the existing dwelling is proposed to be decommissioned and replaced with an Aeration treatment system located north of the existing dwelling. The Site Plan in **Appendix B** details the location of the disposal field, however details and a TP58 will be provided at building consent stage.

The site is considered a HAIL site as it was likely previously used for horticultural activities. However, the proposal will not change the use of the site because of the existing residential activity. The level of earthworks proposed also do not trigger further HAIL / NES consent requirements.

3. RECORD OF TITLE, CONSENT NOTICES AND LAND COVENANTS

The site Record of Title is attached at **Appendix A**. There are no consent notices registered on the title.

4. DESCRIPTION OF THE PROPOSAL

The applicant proposes to build a second dwelling, commensurate with a MRU, to the northwest of the principal dwelling. While the dwelling can meet the definition of a MRU on all relevant criteria, it technically cannot be processed as one because of the size of the property, being under 5,000m2. The dwelling will be single storey with a floor area of 65m2. The dwelling design includes one bedroom, a kitchen, bathroom and decking. The proposed dwelling will be in accordance with the site layout, floor plan and elevations prepared by O'Brien Design Consulting and attached at **Appendix B**.

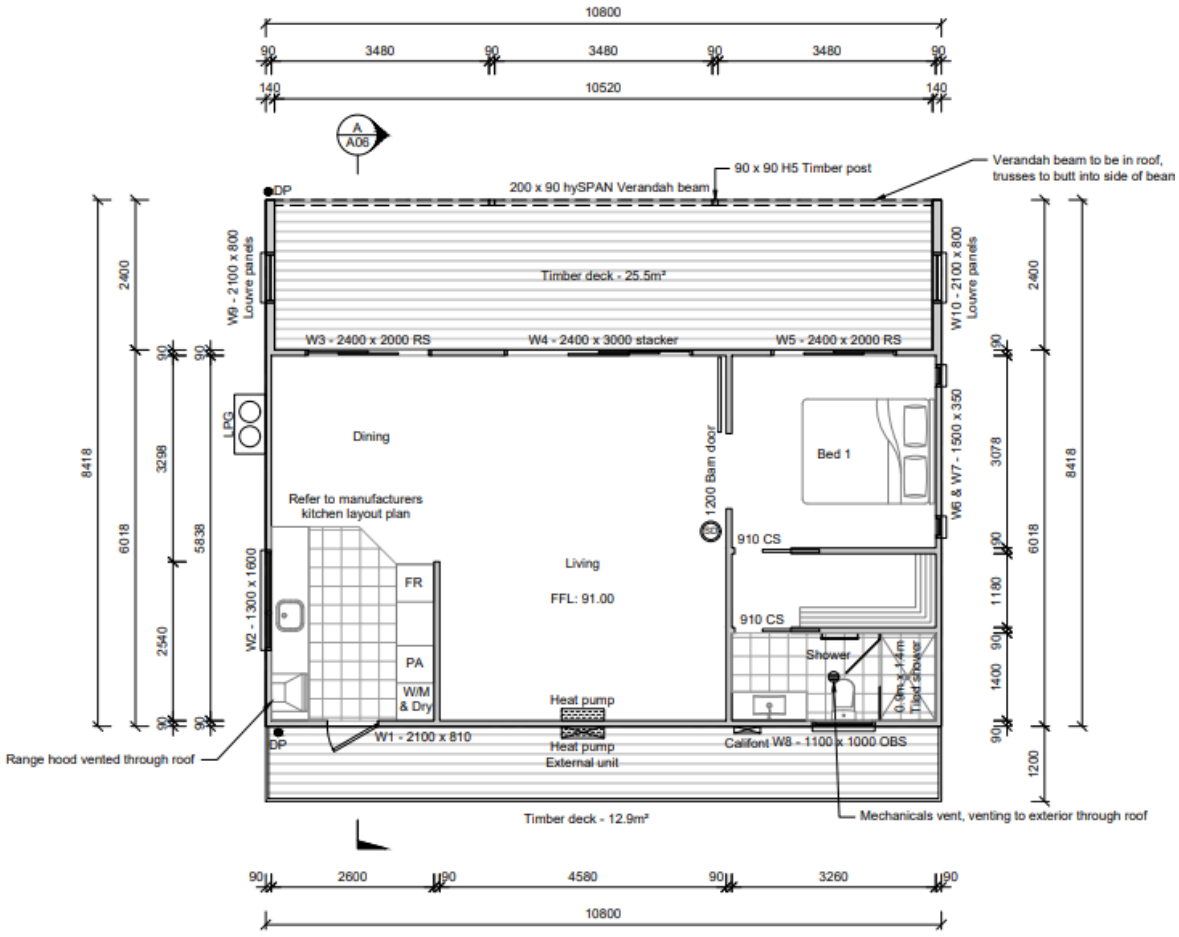


Figure 3 - Proposed floor plan (Source: O'Brien Design Consulting)

The total impermeable areas on the property would be 779m2 or 19.9% of the site area. Total building coverage area would comprise 409.4m2 or 10.3% of the site area.

The existing metal driveway will provide access to the proposed second dwelling.

There are existing connections for electricity, telecommunications and internet which can be utilised

for the proposed second dwelling. Stormwater from the proposed second dwelling will be directed to a separate 10,000l tank adjacent to the dwelling, which will also be used for water supply. The wastewater from the second dwelling will be connected to the proposed new aeration treatment system that will be installed at the time of building consent and will service both the principal dwelling and the second dwelling.

Proposed earthworks are minimal and only include a cut/fill volume of 20m^3 which is well within the permitted limits for this zone.

The purpose of the proposed dwelling is for the parents of the applicants to reside on the site and provide an option for intergenerational living.

5. REASONS FOR CONSENT

This application seeks consent for:

- a second dwelling in the Rural Production zone;
- a breach to the permitted threshold for Stormwater Management; and
- a breach to the Setback from Boundaries threshold.

No resource layers apply to the subject property.

Figure 4 - ODP Map – Rural Production Zone (Source: Far North Maps)

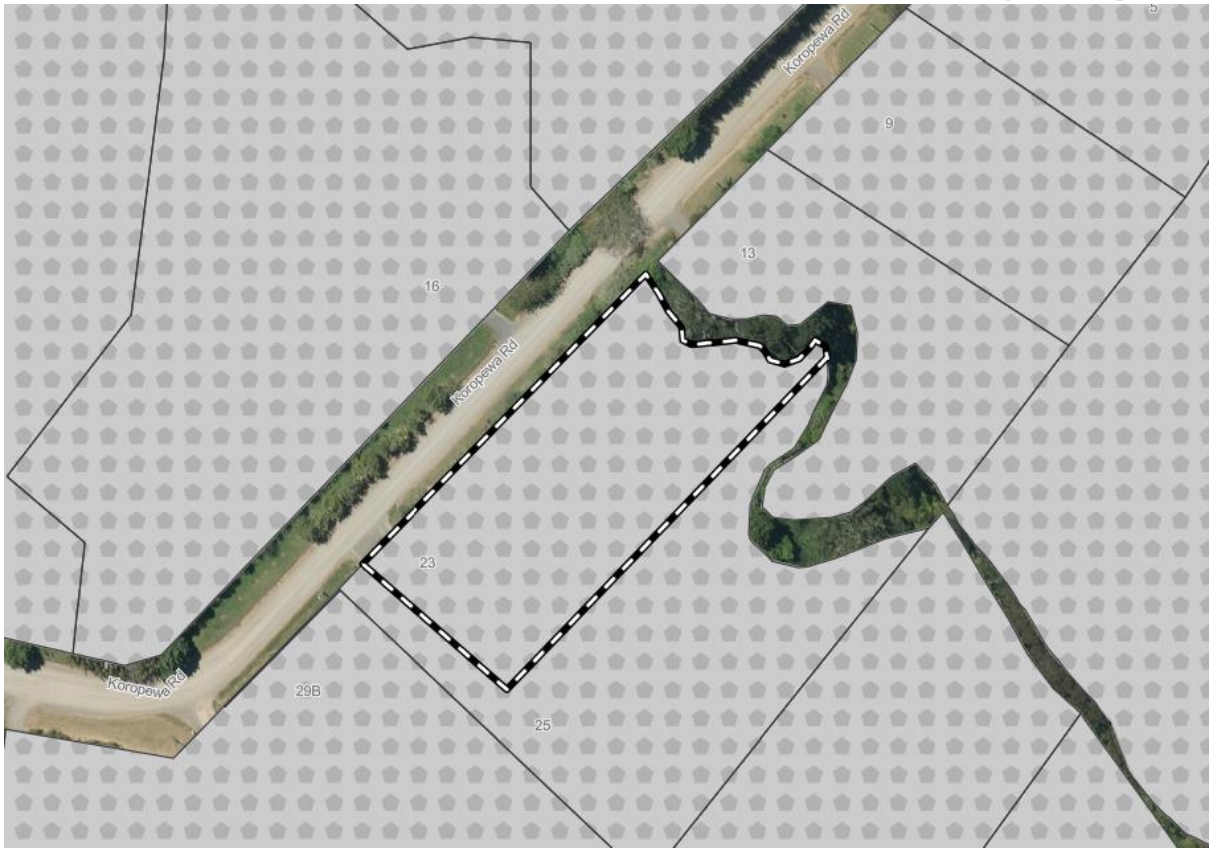


Figure 5 – PDP Map – Horticulture Zone (Source: Far North Maps)

Tables below provide an assessment against the applicable ODP and PDP performance standards and identifies the reasons for resource consent. For the ODP these comprise the rules of the Part 2-Environment Provisions and the Part 3 - District Wide Rules. For the PDP these comprise of the rules with immediate legal effect.

ODP performance standards

Table 1 – Rural Production Zone - Performance Standards

Rural Production Zone standards		
Rule	Standards	Performance/Comments
Residential Intensity	**Permitted** – One unit per 12ha of land **Restricted Discretionary** - One unit per 4ha of land **Discretionary** – One unit per 2ha of land • In all cases the land shall be developed in such a way that each unit shall have at least 2,000m² for its exclusive use surrounding the unit plus a minimum of 1.8ha elsewhere on the property.	The proposed dwelling is for all intents and purposes considered a MRU, however it cannot technically be considered one due to the size of the site. ***Non-complying***

Sunlight	**Permitted** - No part of any building shall project beyond a 45 degree recession plane as measured inwards from any point 2m vertically above ground level on any site boundary **Restricted Discretionary –** if permitted standard breached	**Complies**
Stormwater Management	**Permitted** - The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%. **Controlled** - The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 20%.	Total impermeable surfaces of 779m^2 or 19.9% is proposed. ***Controlled Activity***
Setback from Boundaries	**Permitted** - No building shall be erected within 10m of any site boundary; **Restricted Discretionary –** if permitted standard breached	The proposed dwelling is located within the 10m permitted setback from Koropewa Road on the western boundary. ***Restricted Discretionary***
Keeping of Animals		**N/A.**
Noise		Residential activity **Complies**
Building Height	**Permitted** - The maximum height of any building shall be 12m. **Restricted Discretionary** - The maximum height of any building shall be 15m.	The proposed dwelling will be less than 12m in height. **Complies**
Helicopter Landing Area		**N/A.**
Building Coverage	**Permitted** - Any new building or alteration/addition to an existing building is a permitted activity if the total Building Coverage of a site does not exceed 12.5% of the gross site area. **Controlled** - Any new building or alteration/addition to an existing building is a controlled activity if the total Building Coverage of a site does not exceed 15% of the gross site area.	Total building coverage of 409.4m^2 or 10.3% is proposed. **Complies**
Scale of Activities		**N/A.**
Temporary Events		**N/A.**

Minor Residential Unit	**Controlled -** Minor residential units are a controlled activity in the zone provided that: a) there is no more than one minor residential unit per site; b) the site has a minimum net site area of 5000m^2 c) the minor residential unit shares vehicle access with the principal dwelling; d) the separation distance of the minor residential unit is no greater than 30m from the principal dwelling.	The proposed dwelling is for all intents and purposes considered a MRU, however it cannot technically be considered one due to the size of the site [refer clause b]. **N/A**

Table 2 – District Wide Performance Standards

District Wide Standards		
Rule	**Standard**	**Performance/Comments**
Natural and Physical Resources		
12.1 Landscape & Natural Features	**12.1.6.1.1 Protection of Outstanding Landscape Features** **12.1.6.1.2 Indigenous Vegetation Clearance in Outstanding landscapes** **12.1.6.1.3 Tree Planting in Outstanding Landscapes** **12.1.6.1.4 Excavation and/or filling within an outstanding landscape** **12.1.6.1.5 Buildings within outstanding landscapes** **12.1.6.1.6 Utility Services in Outstanding Landscapes**	**N/A** -
12.2 Indigenous Flora and Fauna	**12.2.6.1.1** Indigenous Vegetation Clearance Permitted Throughout the District **12.2.6.1.2** Indigenous Vegetation Clearance in the rural Production and Minerals Zones **12.2.6.1.3** Indigenous Vegetation Clearance in the General Coastal Zone **12.2.6.1.4** Indigenous Vegetation Clearance in Other Zones	**N\A** –

District Wide Standards		
Rule	**Standard**	**Performance/Comments**
12.3 Earthworks	**12.3.6.1.1 Excavation and/or filling, excluding mining and quarrying, in the Rural Production Zone or Kauri Cliffs Zone** **Permitted** – Maximum of 5,000m^3 within a 12-month period and cannot be higher than 1.5m cut or fill.	Proposed earthworks include a total cut/fill volume of 20m^3. Cut and/or fill is less than 1.5m. **Complies**
12.4 Natural Hazards	**12.4.6.1.1** Coastal Hazard 2 Area **12.4.6.1.2** Fire Risk to Residential Units	Proposed dwelling is not within 20m from non-landscaped vegetation. **Complies**
12.5 Heritage	**12.5.6.1.1** Notable Trees **12.5.6.1.2** Alterations to/and maintenance of historic sites, buildings and objects **12.5.6.1.3** Registered Archaeological Sites	**N/A**
12.5A Heritage Precincts	There are no Heritage Precincts that apply to the site.	**N/A**
12.6 Air	Not applicable	**N/A**
12.7 Lakes, Rivers, Wetlands and the Coastline	**12.7.6.1.1** Setback from lakes, rivers and the coastal marine area **12.7.6.1.2** Setback from smaller lakes, rivers and wetlands **12.7.6.1.4** Land Use Activities involving the Discharges of Human Sewage Effluent **12.7.6.1.5** Motorised Craft **12.7.6.1.6** Noise	Proposed dwelling is outside the necessary setbacks from lakes and rivers. **Complies** **Complies** **N/A** **N/A**
12.8 Hazardous Substances		**N/A**
12.9 Renewable Energy and Energy Efficiency		**N/A**

Chapter 15 - Transportation standards		
Maximum daily one-way traffic movements - Rural Production	**Permitted** – 60 or 30 if access is via a State Highway	The primary dwelling is excluded from the total number of traffic movements. Therefore, an additional 10 traffic movements will be generated from this proposal. **Complies**
Parking	**Appendix C**	There will be sufficient parking areas associated with the dwelling. **Complies**
Access	**Permitted** – Private access may serve a maximum of 8 household equivalents	The proposed second dwelling would share access with the existing dwelling via the existing access off Koropewa Road. **Complies**

In terms of the ODP the application falls to be considered as a Non-complying Activity in accordance with Section 104A of the Resource Management Act 1991 (RMA).

PDP performance standards

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

Proposed District Plan				
Matter	**Rule/Std Ref**	**Relevance**	**Compliance**	**Evidence**
Hazardous Substances Majority of rules relates to development within a site that has heritage or cultural items scheduled and mapped however Rule HS-R6 applies to any development within an SNA – which is not mapped	Rule HS-R2 has immediate legal effect but only for a new significant hazardous facility located within a scheduled site and area of significance to Māori, significant natural area or a scheduled heritage resource HS-R5, HS-R6, HS-R9	N/A	Yes	Not relevant as no such substances proposed.

Heritage Area Overlays (Property specific) This chapter applies only to properties within identified heritage area overlays (e.g. in the operative plan they are called precincts for example)	All rules have immediate legal effect (HA-R1 to HA-R14) All standards have immediate legal effect (HA-S1 to HA-S3)	N/A		Not indicated on Far North Proposed District Plan
Historic Heritage (Property specific and applies to adjoining sites (if the boundary is within 20m of an identified heritage item)). Rule HH-R5 Earthworks within 20m of a scheduled heritage resource. Heritage resources are shown as a historic item on the maps) This chapter applies to scheduled heritage resources – which are called heritage items in the map legend	All rules have immediate legal effect (HH-R1 to HH-R10) Schedule 2 has immediate legal effect	N/A		Not indicated on Far North Proposed District Plan
Notable Trees (Property specific) Applied when a property is showing a scheduled notable tree in the map	All rules have immediate legal effect (NT-R1 to NT-R9) All standards have legal effect (NT-S1 to NT-S2) Schedule 1 has immediate legal effect	N/A		Not indicated on Far North Proposed District Plan
Sites and Areas of Significance to Māori (Property specific)	All rules have immediate legal	N/A		Not indicated on Far North Proposed District Plan

Applied when a property is showing a site / area of significance to Maori in the map or within the Te Oneroa-a Tohe Beach Management Area (in the operative plan they are called site of cultural significance to Maori)	effect (SASM-R1 to SASM-R7) Schedule 3 has immediate legal effect			
Ecosystems and Indigenous Biodiversity SNA are not mapped – will need to determine if indigenous vegetation on the site for example	All rules have immediate legal effect (IB-R1 to IB-R5)	N/A		Not indicated on Far North Proposed District Plan. No vegetation clearance proposed.
Activities on the Surface of Water	All rules have immediate legal effect (ASW-R1 to ASW-R4)	N/A		Not indicated on Far North Proposed District Plan
Earthworks all earthworks (refer to new definition) need to comply with this	The following rules have immediate legal effect: EW-R12, EW-R13 The following standards have immediate legal effect: EW-S3, EW-S5	Yes	Complies	Proposed earthworks will be in accordance with the relevant standards including GD-05 and will have an ADP applied.
Signs (Property specific) as rules only relate to situations where a sign is on a scheduled heritage resource (heritage item), or within the Kororareka Russell or Kerikeri Heritage Areas	The following rules have immediate legal effect: SIGN-R9, SIGN-R10 All standards have immediate legal effect but only for signs on or attached to a scheduled heritage	N/A		Not indicated on Far North Proposed District Plan

	resource or heritage area			
Orongo Bay Zone (Property specific as rule relates to a zone only)	Rule OBZ-R14 has partial immediate legal effect because RD-1(5) relates to water	N/A		Not indicated on Far North Proposed District Plan
Comments:				
No consents are required under the PDP.				

Overall, the application will be considered as a **Non-complying Activity** due to the proposed second dwelling despite being commensurate in scale with that of a MRU, but not meeting the full definition of a MRU due to the size of the site. If considered a MRU the application would be considered as a Restricted Discretionary activity due to the setback from boundaries breach.

Clause 2(1)(d) of Schedule 4 of the RMA requires applicants to identify other activities of the proposal with the intention of capturing activities which need permission or licensing under other enactments. Given the proposal does not include any discharges exceeding 3,000 litres daily or large-scale earthworks, or seeks to take any resources under the management of the Northland Regional Council, it is considered that no Regional Council authorizations are required to carry out the proposed development.

6. NOTIFICATION ASSESSMENT

Public Notification

The table below outlines the steps associated with public notification insofar as it relates to s95 of the Act.

Step 1	Mandatory public notification in certain circumstances	
S95A(3)(a)	Has the applicant requested that the application be publicly notified?	No
S95A(3)(b)	Is public notification required under section 95C?(after a request for further information)	TBC
S95A(3)(c)	Has the application been made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act 1977.	No
Step 2	if not required by step 1, public notification precluded in certain circumstances	
S95A(5)(a)	Is the application for a resource consent for 1 or more activities and each activity is subject to a rule or national environmental standard that precludes public notification?	No
S95A(5)(b)	Is the application for a resource consent for 1 or more of the following, but no other, activities; (i) a controlled activity;	No

	(iii) a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity;	
Step 3	if not precluded by step 2, public notification required in certain circumstances	
S95A(8)(a)	Is the application for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification.	No
S95A(8)(b)	Does the consent authority decides, in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor	TBC
Step 4	public notification in special circumstances	
S95A(9)	Do special circumstances exist in relation to the application that warrant the application being publicly notified.	No

The proposed development does not meet the tests for mandatory public notification, nor does it meet the tests for precluding public notification. There are not considered to be any special circumstances that warrant the application to be notified. Therefore, an assessment of the proposals effects on the environment is required to ascertain the effects of the development and whether public notification is required.

Limited notification

The table below outlines the steps associated with limited notification insofar as it relates to s95 of the Act.

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

Step 3	if not precluded by step 2, certain other affected persons must be notified	
S95B(7)	If in the case of a boundary activity, whether an owner of an allotment with an infringed boundary is an affected person in accordance with s95E.	TBA
S95B(8)	If in the case of any other activity, a person is an affected person in accordance with section 95E.	TBA
Step 4	further notification in special circumstances	
S95B(10)	If special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined to be eligible for limited notification under this section.	No

Affected Person Determination

As the proposed activity does not trigger mandatory limited notification, nor is it precluded, an assessment of potential affected persons must be undertaken.

The consent authority has discretion to determine whether a person is an affected person. A person is affected if an activity's adverse effects are minor or more than minor to them. The effects of the proposal on adjacent landowners have been undertaken below.

Residential Intensity effects

The proposed dwelling has minimal effects on the other buildings and the surrounding area due to its modest size, housing density of the area and the extensive boundary planting in place. The second dwelling is akin to a MRU, which is enabled in the Rural Production zone in the ODP. While the size of the site is smaller than that required to enable a MRU in this zone, it would be difficult to discern any effects of residential intensity relative to site size for this proposal when viewed from a public place or neighbouring properties.

The proposal only adds one bedroom to the property and is akin to an addition to the existing dwelling. The site is not being subdivided so will stay within the ownership of the applicant. The effects therefore are not considered to be any different to that of an extension to the existing dwelling.

As the proposed dwelling only breaches the setback from boundary control with Koropewa Road, which is heavily landscaped, there will be no visual domination or loss of privacy and sunlight to properties.

Stormwater Management

The increase in stormwater effects on the site overall are considered less than minor and can be adequately mitigated through the collection of rainfall from the roof into the potable water supply. The Stormwater Mitigation Report prepared by Wilton Joubert (**Appendix C**) supporting the

application concludes that provided that the recommendations within the report are adhered to, the effects of stormwater runoff resulting from the site are considered to have less than minor effects on the receiving environment, equivalent to conditions that would result from development proposals falling within the Permitted Activity coverage threshold.

Setback from Boundaries

The proposed second dwelling breaches the setback from boundaries control on the boundary with Koropewa Road. The breach does not involve a boundary with a private land holding. Koropewa Road is in a rural environment where footpaths are not present so little to no walking traffic can be expected. Additionally, there is significant planting along the boundary of Koropewa Road, which will make it difficult for anyone to discern that there is a second dwelling on 23 Koropewa Road. It is considered therefore that there are no actual effects from the setback from boundaries breach from the proposed second dwelling.

Effects Conclusion (Persons)

Having considered the effects above, the adverse effects on persons are considered to be less than minor. There are not considered to be any special circumstances that warrant the application to be notified.

The section below provides the assessment of effects on the environment.

7. STATUTORY CONSIDERATIONS

Section 104B of the RMA governs the determination of applications for Non-complying activities:

> **104B Determination of applications for discretionary or non-complying activities**
>
> After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority—
>
> (a) may grant or refuse the application; and
>
> (b) if it grants the application, may impose conditions under section 108.

With respect to Non-complying activities, a consent authority may grant or refuse the application, and may impose conditions under section 108 of the RMA.

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

104 Consideration of applications

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

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

(ab) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity; and

(b) any relevant provisions of—

(i) a national environmental standard:

(ii) other regulations:

(iii) a national policy statement:

(iv) a New Zealand coastal policy statement:

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

(vi) a plan or proposed plan; and

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

For this application, the following relevant RMA plans, policy statements and national environmental standard have been considered:

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, 2011

- National Policy Statement for Highly Productive Land
- Northland Regional Policy Statement
- Operative Far North District Plan 2009
- Proposed Far North District Plan 2022

As part of this application and Assessment of Effects, the relevant regional and district level objectives and policies, performance standards and assessment criteria have been considered.

Assessment of Effects on the Environment (AEE)

The RMA (section 3) meaning of effect includes:

3 Meaning of effect

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

(a) any positive or adverse effect; and

(b) any temporary or permanent effect; and

(c) any past, present, or future effect; and

(d) any cumulative effect which arises over time or in combination with other effects—

regardless of the scale, intensity, duration, or frequency of the effect, and also includes—

(e) any potential effect of high probability; and

(f) any potential effect of low probability which has a high potential impact.

Section 104(2) of the RMA states that:

> *"when forming an opinion for the purposes of subsection (1)(a), a consent authority may disregard an adverse effect of the activity on the environment if a national environmental*

standard or the plan permits an activity with that effect."

This is referred to as the "permitted baseline", which is based on the permitted performance standards and development controls that form part of a district plan. For an effects-based plan such as the Far North District Plan where specified activities are not regulated, determining the permitted baseline is a useful tool for determining a threshold of effects that are enabled by the zone. In this instance, a standard application for a second dwelling or a MRU with Stormwater Management breach requires consent. This application also breaches the setback from boundaries standard, which also requires consent.

The focus of this AEE is on addressing the matters directly related to the rules in the ODP regarding the second dwelling, stormwater management and setback from boundaries. Also, a brief overview of the degree to which this achieves the objectives and policies of the National Policy Statement for Highly Productive Land, the Northland Regional Policy Statement, ODP and PDP.

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

The NES-CS is potentially applicable to this site. However, because of its historic use for residential activities the proposed dwelling is considered as part of the existing residential activity and no further contamination testing is required. No change of use is therefore proposed.

Positive Effects

The applicant will benefit from the positive effects of being able to build a second dwelling on their property which will be used to provide intergeneration living opportunities for our clients parents.

Second dwelling effects

The potential effects of the proposed dwelling are considered in the context of the MRU Rule 8.6.5.2.3 being that it meets the 'definition' of one, except for the site size. A MRU within the Rural Production Zone is typically a controlled activity if the definition of a MRU is met along with the specified conditions. See the assessment below:

i. *the extent of the separation between the principal dwelling and the minor residential unit;*

   The proposed second dwelling is approximately 6m at its closest point from the principal dwelling.

ii. *the degree to which design is compatible with the principal dwelling;*

   The design of the second dwelling is modern with a vertical corrugate steel cladding. It is considered that the use of modern cladding materials for the second dwelling will complement the materials used for the principal dwelling.

iii. *the extent that services can be shared;*

As previously mentioned, existing connections for electricity, telecommunications and internet connections can be utilised for the proposed second dwelling. Water tanks located adjacent to the existing shed and south of the principal dwelling, provide the necessary potable water supply for the principal dwelling. An additional 10,000l tank is proposed for the second dwelling providing it a potable water supply. The additional water tank will also mitigate stormwater runoff from the roof of the second dwelling. The existing septic tank servicing the existing dwelling is proposed to be replaced with an aeration treatment system that will service both he existing dwelling and the proposed second dwelling. While the disposal field has been demonstrated on the Site Plan in **Appendix B,** details of the treatment system itself will be supplied at building consent stage. The principal dwelling and second dwelling will share the same accessway off Kapiro Road.

iv. *the ability to mitigate any adverse effects by way of provision of landscaping and screening;*

Adverse effects associated with the proposed second dwelling are anticipated to be less than minor therefore landscaping and screening beyond that existing is not proposed. The site already contains extensive planting on all boundaries.

v. *the location of the unit.*

The proposed MRU will be located in the eastern area of the site, west of the principal dwelling. The existing access and driveway will be utilised to provide access to the proposed second dwelling. There is sufficient space for vehicular turning and parking for the proposed second dwelling.

With the exception of site size, the proposed second dwelling is commensurate with a MRU provided as a controlled activity in the ODP. It is considered that the unique site characteristics, including the significant boundary plantings will appropriately mitigate any adverse effects of placing the second dwelling on the property to the point where the effects will be no more than minor.

Stormwater Management effects

A comprehensive Stormwater Mitigation Report has been prepared by Wilton Joubert and supplied in **Appendix C**. The mitigation report has been prepared in accordance with:

- The Far North District Council Engineering Standards 2023
- The operative Far North District Council District Plan

The report concludes, provided that the recommendations within this report are adhered to, the effects of stormwater runoff resulting from the unattenuated proposed / existing impermeable surfaces are considered to have less than minor effects on the receiving environment, equivalent to conditions that would result from development proposals falling within the Permitted Activity coverage threshold. See the assessment below:

a) *the extent to which building site coverage and impermeable surfaces contribute to total catchment impermeability and the provisions of any catchment or drainage plan for that catchment;*

See the Stormwater Mitigation Report which states impermeable surfaces resulting from the development increase site impermeability by 173m². Through tank attenuation, runoff is to be attenuated to predevelopment conditions for the proposed impermeable coverage exceeding the Permitted Activity threshold.

b) *the extent to which Low Impact Design principles have been used to reduce site impermeability.*

See the Stormwater Mitigation Report which states the impermeable areas in exceedance of Permitted Activity Rule 8.6.5.1.3 have been attenuated back to pre-development flow rates for the 1% AEP storm event, adjusted for climate change. WQV control has also been provided for the impermeable areas in excess of the permitted activity threshold.

c) *any cumulative effects on total catchment impermeability.*

See the Stormwater Mitigation Report which states impermeable coverage will increase by 173m².

d) *the extent to which building site coverage and impermeable surfaces will alter the natural contour or drainage of the site or disturb the ground and alter its ability to absorb water.*

See the Stormwater Mitigation Report which states runoff from the existing / proposed impermeable roof areas is to be collected and directed to the discharge point via sealed pipes. Ponding is not anticipated to occur provided the recommendations within this report are adhered to, mitigating interference with natural water absorption.

e) *the physical qualities of the soil type.*

See the Stormwater Mitigation Report which states the soils is 'Kerikeri Volcanic Group – moderate drainage.

f) *the availability of land for the disposal of effluent and stormwater on the site without adverse effects on the water quantity and water quality of water bodies (including groundwater and aquifers) or on adjacent sites.*

See the Stormwater Mitigation Report which states runoff resulting from the existing / proposed roof areas is to be collected and directed to the discharge point via sealed pipes, mitigating the potential for runoff to pass over / saturate surrounding soils. The site is large enough for on-site stormwater and effluent disposal (i.e. setbacks between water sources and effluent disposal comply with Table 9 of the PRPN).

g) *the extent to which paved, impermeable surfaces are necessary for the proposed activity.*

See the Stormwater Mitigation Report which states the existing and proposed driveway areas are necessary to provide access to the existing and proposed structures and is not considered excessive.

h) *the extent to which landscaping and vegetation may reduce adverse effects of run-off*

See the Stormwater Mitigation Report which states existing vegetation and any plantings introduced by the homeowner during occupancy will aid in reducing surface water velocity and providing treatment. No specific landscaping scheme is proposed as part of the stormwater management system described herein.

i) *the means and effectiveness of mitigating stormwater runoff to that expected by permitted activity threshold.*

See the Stormwater Mitigation Report which states the impermeable areas in exceedance of Permitted Activity Rule 8.6.5.1.3 have been attenuated back to pre-development flow rates for the 1% AEP storm event, adjusted for climate change. WQV control has also been provided for the impermeable areas in excess of the permitted activity threshold.

It is concluded that based on the finding and mitigation proposed in the Stormwater Mitigation report prepared by Wilton Joubert in **Appendix C** that the effects from stormwater will be no more than minor.

Setback from Boundaries

a) *the extent to which the building(s) reduces outlook and privacy of adjacent properties;*

The proposed second dwelling is modest in scale and is less than five metres in height. There is extensive boundary planting on the periphery of the site. The planting along the boundary of Koropwea Road, where the boundary infringement is located, is significant to the point where it will be difficult for anyone travelling along Koropewa Road to discern there is a second dwelling. As such it is considered that the effects on outlook and privacy of the adjacent property is no more than minor.

b) *the extent to which the buildings restrict visibility for access and egress of vehicles;*

The location of the proposed second dwelling does not restrict visibility for access and egress of vehicles.

c) *the ability to mitigate any adverse effects on the surrounding environment, for example by way of planting;*

It is considered that the existing plantings on the property are sufficient in mitigating any adverse effects of the proposed second dwelling. Particularly along the boundary with Koropewa Road where the boundary infringement is located. As such it is considered that the effects are no more than minor.

d) *for sites having a frontage with Kerikeri Road (between its intersection with SH10 and Cannon Drive:*
   i. *the scale of the buildings;*
   ii. *the extent of set back from Kerikeri Road;*
   iii. *the visual appearance of the site from the Kerikeri Road frontage;*
   iv. *the extent to which the building(s) are in harmony with landscape plantings and shelter belts*

   Not applicable.

e) *for residential buildings located within 100m of Minerals Zone:*
   i. *the position of the building platform(s) in relation to the mine or quarry;*
   ii. *the likelihood of the mine or quarry causing environmental effects, especially noise and loss of amenity values, that will impact adversely on the occupiers of the proposed residential building;*
   iii. *the effectiveness of any mitigation measures proposed;*

   Where an application is required under this rule, the owner and/or operator of any mine or quarry within the adjacent Minerals Zone shall be considered an affected party. Where the written approval of the owner and the mine or quarry operator has been obtained, the application will be non-notified.

   The property is not located within 100m of the Minerals zone.

f) *the extent to which the buildings and their use will impact on the public use and enjoyment of adjoining esplanade reserves and strips and adjacent coastal marine areas.*

   The site does not border an esplanade reserve, strip or the coastal environment. It is not considered that the proposed second dwelling will impact on the public use and enjoyment of these spaces.

The proposed second dwelling breaches the setback from boundaries control on the boundary with Koropewa Road. The breach does not involve a boundary with a private land holding. Koropewa Road is in a rural environment where footpaths are not present so little to no walking traffic can be expected. Additionally, there is significant planting along the boundary of Koropewa Road, which will make it difficult for anyone to discern that there is a second dwelling on 23 Koropewa Road. It is considered therefore that there are no actual effects from the setback from boundaries breach from the proposed second dwelling.

National Policy Statements for Highly Productive Land (NPS-HPL)

The NPS-HPL applies to the subject site as that the land is classified as class 2s 1. However, the size of the site is such that it is not considered viable as a productive unit and the effects of what is being proposed on the productive potential of the land is no more than minor.

Councils section 32 analysis on the Rural zones for the PDP provides a useful benchmark in terms of

establishing the quantum of land required to sustain productive property area (ha). As such it is a yardstick to establish whether the protection of highly productive land should apply. If the land is not capable of supporting productive rural activities, then the protection of that use is redundant.

Table 31 identifies Estimated Annual Return ($) by Primary Production Property Size (ha).

Table 31: Estimated Annual Return ($) by Primary Production Property Size (ha)

	Required Productive Property Area (ha)					
Annual Household Return ($)	Sheep, Beef and Grain Farming		Other Livestock Farming (Deer Focussed))	Dairy Farming	Horticulture	
	Sheep and Beef	Arable Crops (Grain Focussed)			Kiwifruit	Viticulture
$ 45,000	242	70	126	46	7	11
$ 50,000	269	77	140	52	8	13
$ 55,000	296	85	154	57	9	14
$ 60,000	323	93	168	62	10	15
$ 65,000	350	101	182	67	11	16
$ 70,000	377	108	196	72	11	18
$ 75,000	404	116	210	77	12	19
$ 80,000	431	124	224	83	13	20
$ 85,000	458	132	238	88	14	21
$ 90,000	484	139	252	93	15	23
$ 95,000	511	147	266	98	15	24
$ 100,000	538	155	280	103	16	25

** Source: M.E (based on available industry data and M.E assumptions)*

The table provides the quantum of land required to support a range of rural production uses. It is clear from the table that horticultural activities require less land than other rural production uses. The table identifies that the smallest quantum of land required that could support a viable horticulture activity is seven hectares. The subject site, along with the surrounding sites are all well below this threshold, with the subject site only being 0.3905 hectares.

Section 3.9 of the NPS-HPL is considered the most relevant in terms of this assessment.

In 3.9 (1) the test in the NPS-HPL is to avoid 'inappropriate' use or development of highly productive land that is not land-based primary production. By way of context, the site and the sites in the immediate surrounds are most accurately described as being lifestyle development in the Rural environment. The exception being the large property adjacent to the southern boundary which is being used in a light industrial capacity.

In terms of the aforementioned site (Lot 3 DP 202022), it is 6.2232 hectares, which is also below the threshold identified in the table above found in Councils section 32 report for the Rural Environment. The site has recently been developed for a light industrial purpose, with a raft of new buildings which ordinarily are constructed with a life expectancy of 50 years. As such the same or similar land use can be anticipated over that timeframe. And while zoned Horticulture in the PDP, the activities being undertaken on the site are commensurate with the zoning of the neighbouring property as Light

Industrial.

Figure 6 – Rural Residential development surrounding 23 Koropewa Rd (Source: Google Maps)

The enclave in the surrounding area is akin to large lot residential ordinarily provided for in the Rural Living zone (4,000m2 Controlled activity subdivision standard). The following properties are identified spatially on Figure 7.

- 1 Pungaere Rd – 2,800m^2
- 3 Pungaere Rd – 1.3 hectares
- 5 Pungaere Rd – 3,500m^2
- 9 Koropewa Rd – 3,777m^2
- 13 Koropewa Rd – 4,250m^2
- 25 Koropewa Rd – 4,250m^2
- 29A Koropewa Rd – 3,936m^2
- 29B Koropewa Rd – 3,578m^2
- 16 Koropewa Rd – 1.0 hectares
- 35 Koropewa Rd – 4,345m^2

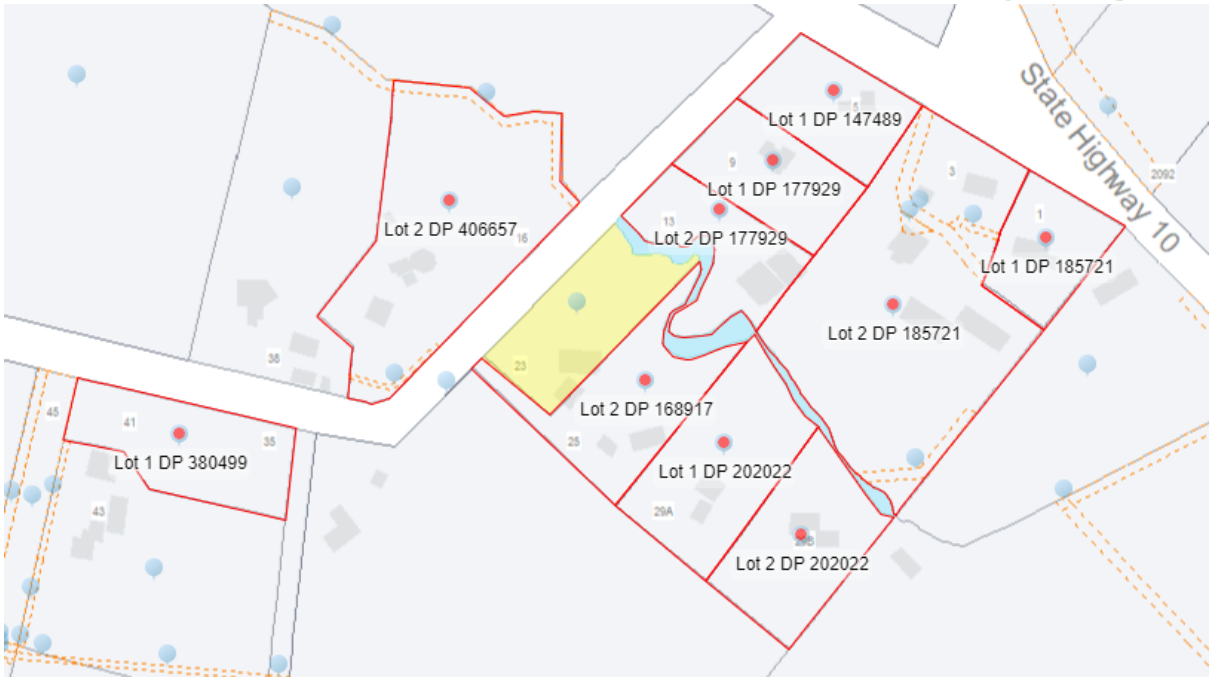


Figure 7 – Rural Residential lot sizes surrounding 23 Koropewa Rd (Source: Google Maps)

It is evident from the land use and subdivision established in the area that the subject site and those sites adjacent are no longer fit for purpose in terms of being suitable for a productive use. As such, there is no benefit in protecting them for a productive use into the future. In other words, the productive potential of the subject site is no longer present and the soil potential has been sterilised already by the existing subdivision and development pattern. To suggest otherwise would be a fanciful exercise.

The subject site, along with those identified in Rigure 7 can only now realistically be used in a residential or lifestyle capacity. The continued use in that capacity is therefore appropriate, provided that the effects on the receiving environment are no more than minor.

In 3.9(2) of the Policy Statement, exceptions are given where the use and development of land identified as being highly productive is appropriate. It is considered that the following exceptions are relevant in terms of the subject site where the land is of a size no longer suitable for productive activities:

- (a) it provides for supporting activities on the land – the proposal is supporting an existing established residential or lifestyle activity.
- (g) it is a small-scale or temporary land-use activity that has no impact on the productive capacity of the land – the application is considered a 'small scale' activity, being it is for a small secondary dwelling, akin to a MRU on a site that has no potential for productive capacity.

In respect of 3.9(3):

- (a) there is not considered to be any loss of the availability and productive capacity of highly productive land given that the site is only 3,905m2. It is best described as being residential or lifestyle in nature and is surrounded by sites of a similar size being used in a similar way.

- (b) the site is not surrounded by land based primary production activities so it is not considered that the existing and proposed use of the land in a residential or lifestyle capacity will incur reverse sensitivity effects on primary production activities.

The combination of the size of the property, the current land use, the surrounding land use and being sufficiently set away from any actual primary production or land that could be used for primary production, means it can be pragmatically concluded that the effects on highly productive land will be no more than minor. As such, the proposal is considered to be consistent with the aims and intents of the NPS-HPL.

Northland Regional Policy Statement

The subject site is within the Northland region and is subject to the governing objectives and policies of the operative Northland Regional Policy Statement - operative May 2016 (RPS). With respect to any identified features, the site is not within any area of 'High' or 'Outstanding' Natural Character Area and is outside the Coastal Environment boundary.

Owing to the relevant characteristics of the site (considered earlier in the report) not all matters of the RPS are relevant when considered at a micro level. Those relevant matters are considered below:

Objective / Policy	Comment
Integrated Catchment Management	Not relevant.
Region-Wide Water Quality	Not relevant.
Ecological Flows and Water Levels	Not relevant.
Indigenous Ecosystems & Biodiversity	Not relevant.
Enabling Economic Wellbeing	The proposal allows for various goods/services in the construction sector in Kerikeri.
Economic Activities – Reverse Sensitivity and Sterilization	The proposal does not result in any reverse sensitivity or sterilization effects.
Regionally Significant Infrastructure	The proposal does not impact any regionally significant infrastructure.
Efficient and Effective Infrastructure	The proposal generally seeks to use existing on site infrastructure.
Security of Energy Supply	Power is already provided to the boundary of the site.
Use and Allocation of Common Resources	Not relevant.
Regional Form	The proposal does not result in any reverse sensitivity effects, or a change in a character or sense of place.

Tangata Whenua Role in Decision Making	Not relevant in this instance.
Natural Hazard Risk	Not relevant.
Natural Character, Outstanding Natural Features, Outstanding Natural Landscapes and Historic Heritage	Not relevant.

There are no other relevant matters that pertain to a second dwelling that requires consideration over and above what is already considered by way of the ODP.

Overall, it is considered that the proposal would not be inconsistent with the RPS.

ODP Objectives and Policies

The relevant objectives and policies of the Plan are those related to the Rural Environment in general, and the Rural Production Zone. The general intent of the Rural Production Zone is revolved around land use compatibility and reverse sensitivity. It has been proven with reference to the relevant matters of control for a MRU that this type of development is enabled in the Rural Production zone generally. It is acknowledged that the site does not meet the size which ordinarily provides for a MRU, however the commentary and assessment above concludes that the introduction of this second dwelling, commensurate with that of a MRU, will not give rise to any undue reverse sensitivity or land use compatibility matters.

Objectives	Assessment
8.6.3.1 To promote the sustainable management of natural and physical resources in the Rural Production Zone.	The proposed second dwelling is on a 3905m^2 site and is not considered economic in terms of productive use. The use is commensurate with the residential or lifestyle use currently undertaken on the site and surrounding sites.
8.6.3.2 To enable the efficient use and development of the Rural Production Zone in a way that enables people and communities to provide for their social, economic, and cultural well being and for their health and safety.	The proposed second dwelling is consistent with the existing use of the site, there are currently no rural production activities being undertaken on the site, or sites immediately surrounding.
8.6.3.3 To promote the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone.	The proposed second dwelling is on a 3905m^2 site and is not considered economic in terms of productive horticultural use. The site is currently being used in a residential/ lifestyle capacity, as are the surrounding sites.
8.6.3.4 To promote the protection of significant natural values of the Rural Production Zone.	The natural values of the Rrual Production zone in this location are not considered to be affected given the existing, legally established land use on the site and surrounding sites. Further the site is not large enough to undertake economic productive use.
8.6.3.5 To protect and enhance the special amenity values of the frontage to Kerikeri Road	Not applicable

between its intersection with SH10 and the urban edge of Kerikeri.	
8.6.3.6 To avoid, remedy or mitigate the actual and potential conflicts between new land use activities and existing lawfully established activities (reverse sensitivity) within the Rural Production Zone and on land use activities in neighbouring zones.	As detailed in the assessment of environmental effects, there are not considered to be any reverse sensitivity effects within the Rural Production zone in this location from the second dwelling.
8.6.3.7 To avoid remedy or mitigate the adverse effects of incompatible use or development on natural and physical resources.	The second dwelling is not considered to be an incompatible use within the context of the surrounding environment.
8.6.3.8 To enable the efficient establishment and operation of activities and services that have a functional need to be located in rural environments.	The application does not affect the Rural Production zone in this location in terms of limiting activities that have a functional need to be located in the rural environment.
8.6.3.9 To enable rural production activities to be undertaken in the zone.	The application does not affect the ability for rural production activities to be undertaken in the Rural Production zone in this location.

Policy	**Assessment**
8.6.4.1 That the Rural Production Zone enables farming and rural production activities, as well as a wide range of activities, subject to the need to ensure that any adverse effects on the environment, including any reverse sensitivity effects, resulting from these activities are avoided, remedied or mitigated and are not to the detriment of rural productivity.	As detailed in the assessment of environmental effects, there are not considered to be any reverse sensitivity effects within the Rural Production zone in this location from the second dwelling. The proposed second dwelling is consistent with the existing use of the site, there are currently no rural production activities being undertaken on the site, or sites immediately surrounding.
8.6.4.2 That standards be imposed to ensure that the off site effects of activities in the Rural Production Zone are avoided, remedied or mitigated.	As detailed in the assessment of environmental effects, any affects from the introduction of the second dwelling in this location are considered to be no more than minor.
8.6.4.3 That land management practices that avoid, remedy or mitigate adverse effects on natural and physical resources be encouraged.	As detailed in the assessment of environmental effects, any affects from the introduction of the second dwelling in this location are considered to be no more than minor.
8.6.4.4 That the type, scale and intensity of development allowed shall have regard to the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone.	The second dwelling compliments is commensurate in scale to that of a MRU in the Rural production zone. It is the size of the site that makes this an application for a second dwelling. The heavily vegetated boundary of the site appropriately mitigates any amenity effects on the Rural Production zone.
8.6.4.5 That the efficient use and development of physical and natural resources be taken into account in the implementation of the Plan.	The second dwelling is considered to be consistent with the existing use of the site and the surrounding sites which are best described as residential or lifestyle in nature.
8.6.4.6 That the built form of development	Not applicable.

allowed on sites with frontage to Kerikeri Road between its intersection with SH10 and Cannon Drive be maintained as small in scale, set back from the road, relatively inconspicuous and in harmony with landscape plantings and shelter belts.	
8.6.4.7 That although a wide range of activities that promote rural productivity are appropriate in the Rural Production Zone, an underlying goal is to avoid the actual and potential adverse effects of conflicting land use activities.	As detailed in the assessment of environmental effects, there are not considered to be any reverse sensitivity effects within the Rural Production zone in this location from the second dwelling. The proposed second dwelling is consistent with the existing use of the site, there are currently no rural production activities being undertaken on the site, or sites immediately surrounding.
8.6.4.8 That activities whose adverse effects, including reverse sensitivity effects, cannot be avoided remedied or mitigated are given separation from other activities.	As detailed in the assessment of environmental effects, there are not considered to be any reverse sensitivity effects within the Rural Production zone in this location from the second dwelling. The proposed second dwelling is consistent with the existing use of the site, there are currently no rural production activities being undertaken on the site, or sites immediately surrounding.
8.6.4.9 That activities be discouraged from locating where they are sensitive to the effects of or may compromise the continued operation of lawfully established existing activities in the Rural Production zone and in neighbouring zones.	As detailed in the assessment of environmental effects, there are not considered to be any reverse sensitivity effects within the Rural Production zone in this location from the second dwelling. The proposed second dwelling is consistent with the existing use of the site, there are currently no rural production activities being undertaken on the site, or sites immediately surrounding.

In terms of district wide matters such as those that affect biophysical elements and physical elements such as infrastructure and transport, the proposal is not impacted by biophysical characteristics that require any consideration and from an infrastructure perspective the proposal can be serviced within its boundary with no resulting effects. The proposal is therefore consistent with the aims and intents of the ODP.

PDP Objectives and Policies

Part 3 – Area Specific Matters / ZONES / Special Purpose zones / Horticulture

Objectives	Assessment
HZ-O1 - The Horticulture zone is managed to ensure its long-term availability for horticultural	The proposed second dwelling is on a 3905m^2 site and is not considered economic in terms of productive horticultural use. This opinion is

activities and its long-term protection for the benefit of current and future generations.	supported by the Rural Environmental Economic Analysis Report prepared by 4Sight Consulting for the Rural Environment s32 analysis for the PDP.
HZ-O2 - The Horticulture zone enables horticultural and ancillary activities, while managing adverse environmental effects on site.	The proposed second dwelling is consistent with the existing use of the site, there are currently no horticulture activities being undertaken.
HZ-O3 - Land use and subdivision in the Horticulture zone: a. avoids land sterilisation that reduces the potential for highly productive land to be used for a horticulture activity; b. avoids land fragmentation that comprises the use of land for horticultural activities; c. avoids any reverse sensitivity effects that may constrain the effective and efficient operation of primary production activities; d. does not exacerbate any natural hazards; e. maintains the rural character and amenity of the zone; f. is able to be serviced by on-site infrastructure.	The proposed second dwelling is on a 3905m^2 site and is not considered economic in terms of productive horticultural use. This opinion is supported by the Rural Environmental Economic Analysis Report prepared by 4Sight Consulting for the Rural Environment s32 analysis for the PDP. No subdivision is being proposed. The site is currently being used in a residential/ lifestyle capacity. The second dwelling will not exacerbate natural hazards. The addition of a modest second dwelling on the site and existing landscaping will maintain the current amenity. All development on the site will be serviced by on-site infrastructure.

Policy	**Assessment**
HZ-P1 - Identify a Horticulture zone in the Kerikeri/Waipapa area using the following criteria: a. presence of highly productive land suitable for horticultural use; b. access to a water source, such as an irrigation scheme or dam able to support horticultural use; and c. infrastructure available to support horticultural use.	The proposed site has been identified through the PDP review to contain these criteria.
HZ-P2 - Avoid land use that: a. is incompatible with the purpose, function and character of the Horticulture zone; b. will result in the loss of productive capacity of highly productive land; c. compromises the use of highly productive land for horticultural activities in the Horticulture zone; and d. does not have a functional need to be located in the Horticultural zone and is	The proposed second dwelling is on a 3905m^2 site and is not considered economic in terms of productive horticultural use. This opinion is supported by the Rural Environmental Economic Analysis Report prepared by 4Sight Consulting for the Rural Environment s32 analysis for the PDP.

more appropriately located in another zone.	
HZ-P3 - Enable horticulture and associated ancillary activities that support the function of the Horticulture zone, where: a. adverse effects are contained on site to the extent practicable; and b. they are able to be serviced by onsite infrastructure.	The addition of a second dwelling on this site does little to affect the ability to support the function of the Horticulture zone with respect to land use on the site. As identified the proposed second dwelling is on a 3905m^2 site and is not considered economic in terms of productive horticultural use. This opinion is supported by the Rural Environmental Economic Analysis Report prepared by 4Sight Consulting for the Rural Environment s32 analysis for the PDP.
HZ-P4 - Ensure residential activities are designed and located to avoid, or otherwise mitigate, reverse sensitivity effects on horticulture activities, including adverse effects associated with dust, noise, spray drift and potable water collection.	The second dwelling compliments the existing residential activity on the rural lifestyle site.
HZ-P5 - Manage the subdivision of land in the Horticulture zone to: a. avoid fragmentation that results in loss of highly productive land for use by horticulture and other farming activities; b. ensure the long-term viability of the highly productive land resource to undertake a range of horticulture uses; c. enable a suitable building platform for a future residential unit; and d. ensure there is provision of appropriate onsite infrastructure.	The proposal does not relate to subdivision.
HZ-P6 - Encourage the amalgamation or boundary adjustments of Horticulture zoned land where this will help to make horticultural activities more viable on the land.	The proposal does not relate to amalgamation or boundary adjustments.
HZ-P7 - Manage land use and subdivision to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application: a. whether the proposal will increase production potential in the zone; b. whether the activity relies on the productive nature of the soil; c. consistency with the scale and character of the rural environment; d. location, scale and design of buildings or structures;	The assessment of effects for this proposal are addressed earlier in the application.

e. for subdivision or non-primary production activities: i. scale and compatibility with rural activities; ii. potential reverse sensitivity effects on primary production activities and existing infrastructure; iii. the potential for loss of highly productive land, land sterilisation or fragmentation f. at zone interfaces: i. any setbacks, fencing, screening or landscaping required to address potential conflicts; ii. the extent to which adverse effects on adjoining or surrounding sites are mitigated and internalised within the site as far as practicable; g. the capacity of the site to cater for on-site infrastructure associated with the proposed activity, including whether the site has access to a water source such as an irrigation network supply, dam or aquifer; h. the adequacy of roading infrastructure to service the proposed activity; i. Any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity; j. Any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.	

Proposed Far North District Plan Objectives & Policies & Weighting

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

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

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

In my view the PDP has not gone through the sufficient process to allow a considered view of the objectives and policies for the Horticulture Zone overlay, however this has still been provided. The activity is non-complying overall, therefore both the ODP and PDP have been assessed accordingly and the proposal is deemed to meet the relevant objectives and policies.

8. PART II – RMA

Purpose

The proposal can promote the sustainable management of natural and physical resources on site, as current and future owners and users of the land are able to provide for their social, cultural and economic wellbeing and their health and safety.

The proposal will provide a modest second dwelling, commensurate with a MRU, on an existing property that is utilized for residential/lifestyle purposes within the rural Kerikeri surrounds. The proposal provides a second dwelling within this area enabling additional accommodation, this will help contribute to the local economy, utilise local services and infrastructure. Housing is sorely needed within the local area, in all shapes and sizes to accommodate various members of the community. In doing so, this achieves all four well beings as identified within Part 2. Air, water, soil, and ecosystems are not anticipated to be adversely affected by the proposed second dwelling within the Rural Production zone. Any effects on the environment are anticipated to be less than minor.

Matters of National Importance

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

a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:

f) the protection of historic heritage from inappropriate subdivision, use, and development:

g) the protection of protected customary rights:

h) the management of significant risks from natural hazards.

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

Māori are not considered to be adversely affected by this proposal, nor is any historic heritage likely to be impacted, however in the event anything is discovered the accidental discovery protocol will be adhered to.

Other Matters

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

(a) kaitiakitanga:

(aa) the ethic of stewardship:

(b) the efficient use and development of natural and physical resources:

(ba) the efficiency of the end use of energy:

(c) the maintenance and enhancement of amenity values:

(d) intrinsic values of ecosystems:

(e) [Repealed]

(f) maintenance and enhancement of the quality of the environment:

(g) any finite characteristics of natural and physical resources:

(h) the protection of the habitat of trout and salmon:

(i) the effects of climate change:

(j) the benefits to be derived from the use and development of renewable energy.

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

The proposal will result in an efficient use of resources with the development occurring within the Kerikeri rural area and the proposal is not anticipated to adversely affect agricultural activities in this area. Amenity values will be maintained because the proposal is similar to some existing activities on nearby properties and the existing boundary landscaping. There will be no adverse impact on local ecosystems or overall.

Treaty of Waitangi

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

9. 'Gateway' Assessment

Section 104D – Particular Restrictions for Non-Complying Activities

When dealing with non-complying activities, before granting an application Council must be satisfied that either the adverse effects of the activity on the environment will be minor (s104D(1)(a)), or the proposed activity will not be contrary to the objectives and policies of a proposed plan and/or plan (s104D(1)(b)).

This consideration for non-complying activities is commonly known as the 'threshold test' or the 'gateway test '. If either of the limbs of the test can be passed, then the application is eligible for approval, but the proposed activity must still be considered under s104. There is no primacy given to either of the two limbs, so if one limb can be passed then the 'test ' can be considered to be passed.

In this instance it has been demonstrated that both the effects of the proposal are no more than minor and that there is positive consistency with all objective and policies of relevance to the proposal. Therefore, FNDC in this instance has both 'limbs' to appropriately decide in favour of this application.

10.Conclusion

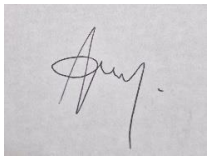
This application seeks resource consent to add a second dwelling, commensurate with a MRU within the Rural Production Zone.

The proposal is consistent with the purpose of the NES-CS, NPS-HPL, the aims of the RPS, it is generally compatible with the aims of the ODP and is also considered to achieve the purpose of the RMA (Part II).

While the application does not wholly align with the intent of the Horticulture zone in the PDP, it is considered that the size of the site is not economic in terms of productive horticultural use. Further, the PDP is not far enough along in the process to apply sufficient weight.

In terms of the potential adverse effects being minor or more than minor, it is considered that there are no directly affected parties to this proposal and that effects can be adequately mitigated, as such notification is not required. Further, there are not considered to be any special circumstances applying to the application.

We look forward to receiving acknowledgment of the application and please advise if any additional information is required.



Andrew McPhee
Consultant Planner

Reviewed
Steven Sanson
Consultant Planner

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

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

R.W. Muir
Registrar-General of Land

Identifier	**NA103A/113**
Land Registration District	**North Auckland**
Date Issued	18 October 1995

Prior References
NA75D/653

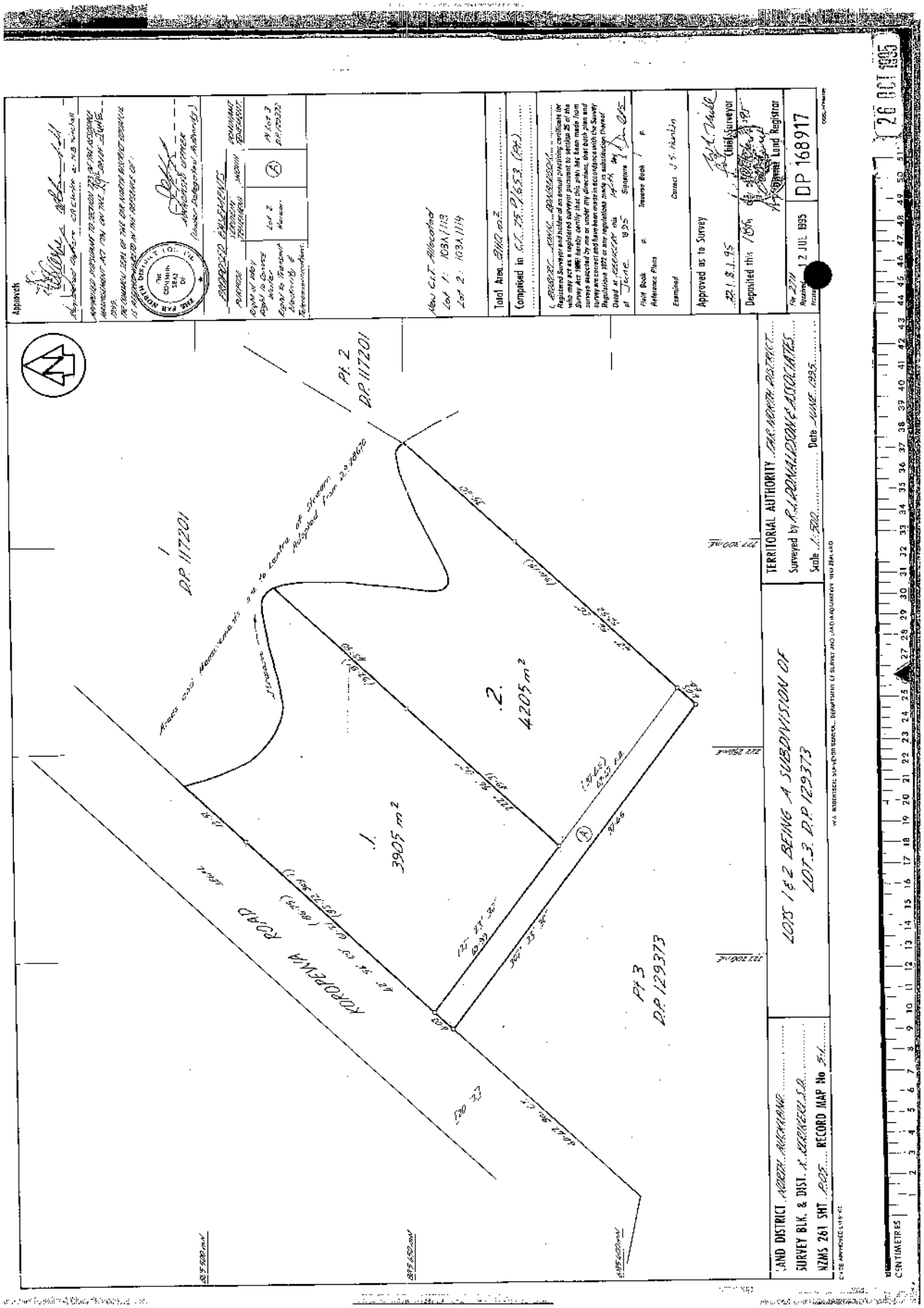
Estate	Fee Simple
Area	3905 square metres more or less
Legal Description	Lot 1 Deposited Plan 168917
Registered Owners	

Colin Andrew Syme and Bettina Suzanne Syme

Interests

Appurtenant hereto is a water right specified in Easement Certificate C082835.3

12200333.2 Mortgage to ASB Bank Limited - 24.9.2021 at 9:29 am


DP 168917
TERRITORIAL AUTHORITY
LOTS 1 & 2 BEING A SUBDIVISION OF LOT 3 D.P. 129373
LAND DISTRICT
SURVEY BLK. & DIST.
NZMS 261 SHT
RECORD MAP No
KOROPEWA ROAD
PT 2 DP 117201
PT 3 DP 129373
1. 3905 m²
2. 4205 m²

Proposed Dwelling

Andrew & Tina Syme

23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Index		
Sheet No.	Sheet Title	Rev
A01a	Site Location Plan	H
A01b	Site Plan	H
A02	Floor Plan & Elevations	H
A03	Foundation Plan & Subfloor Plan	H
A04	Drainage Plan & Roof Plan	H
A05	Framing & Lintel Plan & Bracing Plan	H
A06	Section A	H
A07	Foundation Detail	H
A08	Foundation Detail	H
A09	Foundation Detail	H
A10	Verandah Detail	H
A11	Hold Down Details	H
A12	Cladding Detail	H
A13	Cladding Details	H
A14	Membrane Details	H
A15	Drainage Details	H
Revisions		
-	-	-

Construction Drawings

Date: 6 June 2024

Job Number: 4148

Drawn by:

O'BRIEN DESIGN CONSULTING

T 09 407 5208 | martin@obrienconsulting.co.nz

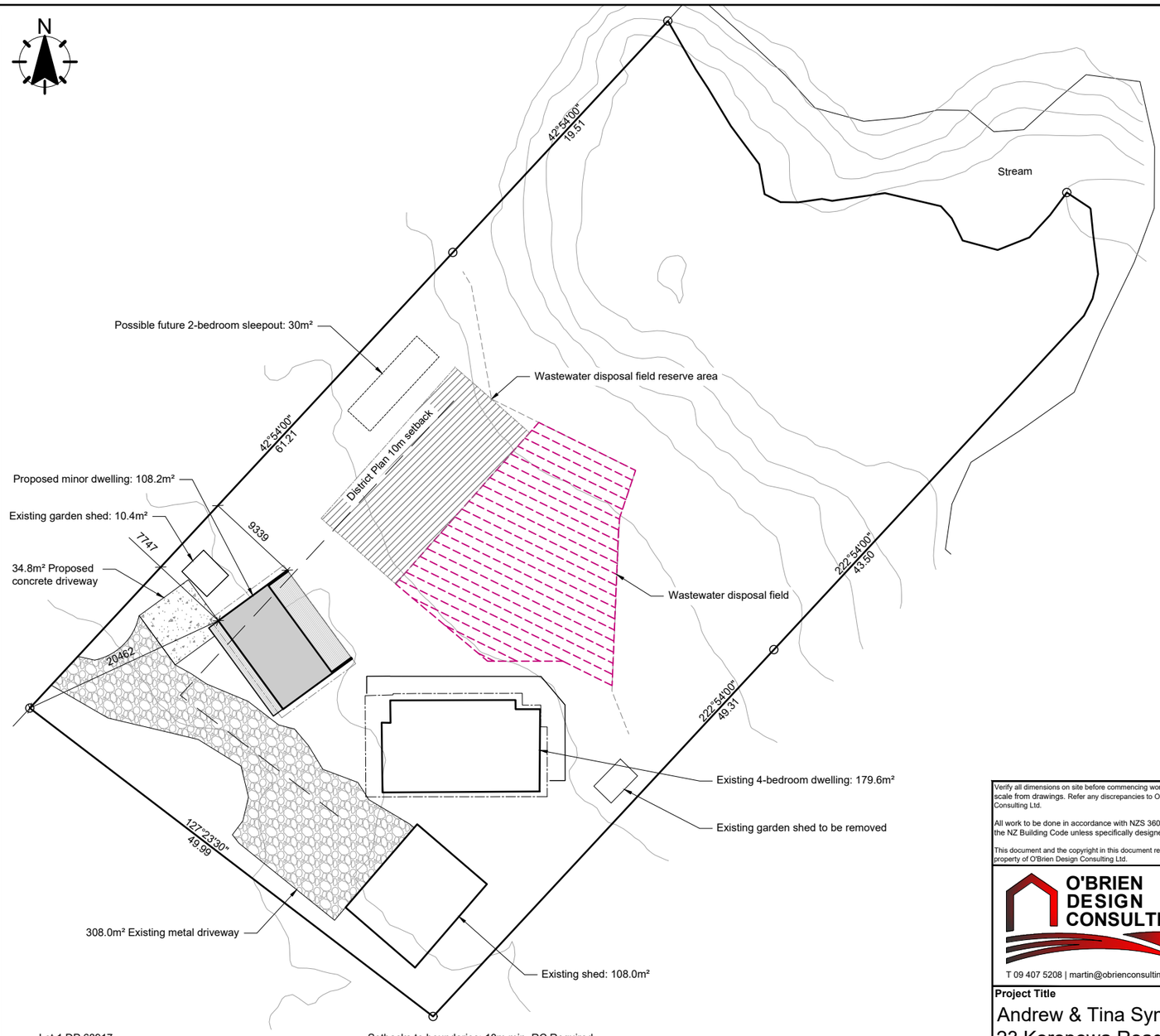
NZS 3604:2011 Site Requirements Summary

Exposure Zone:	C
Wind Zone:	High
Earthquake Zone:	1

In accordance with 3604:2011 Section 3.1.3 (f) the existing foundation and surrounding ground was visually inspected for subsidence and instability. There were no issues with the existing foundation and no signs of fill in the area of the new foundation.

There has been no testing for expansive soils, for this reason the soils have been classed as highly expansive.

Foundations are to be pile foundations embedded 900mm bellow existing ground level into firm ground.



Lot 1 DP 68917
Lot area: 3,905m²
Roof pitch: 15°
Cladding weight: Light
Corrosion zone: C
Wind zone: Very high
Rural Production Zone

District plan compliance:

Residential intensity: RC Required

Sunlight rule: Complies

Stormwater Management

(Impermeable surfaces):	
Existing metal driveway:	308.0m²
Existing dwelling:	179.6m²
Existing garage:	108.0m²
Existing garden shed:	10.4m²
Proposed minor dwelling:	108.2m²
Proposed concrete driveway:	34.8m²
Possible future 2-bedroom sleepout:	30.0m²
Total proposed:	779.0m²

Total permitted = 15% of gross site area = 585.8m²
Total proposed = 779.0m² = 19.9% RC Required

Setbacks to boundaries: 10m min. RC Required

Building height:
Permitted: 12m max
Proposed: 5.0m approx. Complies

Building Coverage:

Existing dwelling:	152.8m²
Existing garage:	108.0m²
Existing shed:	10.4m²
Proposed minor dwelling:	108.2m²
Possible future 2-bedroom sleepout:	30.0m²
Total proposed:	409.4m²

Total permitted = 12.5% of gross site area = 488.1m²
Total Proposed = 409.4m² = 10.5% Complies

Earthworks

Cut: 10m²
Fill: 10m²
Total: 20m²

Total permitted = 5,000m³ Complies

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Site Location Plan

Drawn 6 June 2024

Project No 4148

Rev H

Sheet A01a

Scale (A3 Original) 1: 500
5 2.5 0 5 10 m

N

NOTES

1. All heights shown are existing ground heights.
2. All drainage to comply with AS/NZS3500 & NZBC G13/AS1. All drainage is diagrammatical, drainlayer to determine on site drainage layout and provide asbuilt plan when complete.
3. Length of dripper lines to be no more than 100m between feed points.
4. Dripper lines to follow contour lines
5. Dripper lines to be setback:

- 5m from any intermittent storm water flow path such as a drain or overland flow path down slope of the field
- 30m from any stream.

6. Overflow from water tanks to be directed well away from the proposed wastewater disposal field.
7. The works which are being proposed will comply with Earthworks EW-S3 Accidental Discovery Protocol and Earthworks EW-S5 Erosion and Sediment Control - Auckland Council Guideline Document GD005 GD05 Erosion and Sediment Control.pdf (aucklanddesignmanual.co.nz)

Possible future 1-bedroom sleepout: 30m²

Roadside open drain

Stormwater overflow: 100mm Ø pipe, min. gradient 1:120

5m Setback from open drain

5m

42°54'00" 61.21

384m² (100%) Reserve area

Aeration treatment system, refer to TP58 for manufacturer

30mm Alkathene pipe, TBC with manufacturers installation instructions

Proposed stormwater detention tank TBC by engineer

BH1

384m² Wastewater disposal field (subsurface dripper line): 384m Length approx of dripperline with emitters at no greater than 600mmc/c with flow rate of 1.6l/hr at 1000mm spacing's buried 150-200mm below surface within topsoil layer

34.8m² Proposed concrete driveway

Existing garden shed

90.30 DP

Koropewa Road, Kerikeri

90.87 DP

Proposed minor dwelling

FFL: 91.00

Cut height: 90.34

Cut

90.22

1.5m Setback from building

1.5m

Existing crossing

91.30

91.26

91.16

91.13

91.05

Step

90.85

90.77

Proposed sewer pipe: 100mm Ø pipe, gradient 1:60

Existing sewer pipe to be extended: 100mm Ø pipe, gradient 1:60

179.6m² Existing 4-bedroom dwelling

30m Setback from stream

222°54'00" 49.50

Stream

222°54'00" 49.31

Existing garden shed to be removed

Existing septic tank to be decommissioned

Existing overflow pipe from existing stormwater tanks: 100mm Ø pipe

127°23'30" 49.99

108.0m² Existing shed & 1-bedroom sleepout

Existing stormwater tanks

Legend

- Open drain
- Setbacks
- Stormwater: 100mm Ø pipe, min. gradient 1:120
- Stormwater overflow: 100mm Ø pipe, min. gradient 1:120
- Power cable
- Sewer: 100mm Ø pipe, gradient 1:60
- Alkathene pipe
- Wastewater disposal field
- Reserve area

O'BRIEN DESIGN CONSULTING

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Project Title

Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title

Site Plan

Drawn 6 June 2024

Project No 4148

Rev H

Sheet A01b

Scale (A3 Original) 1: 250

2.5 1.25 0 2.5 5 m

SPECIFACTION:

- High wind zone
- Exposure zone C
- Subfloor foundations
- 2.55m Stud height
- Vertical corrugate cladding
- Corrugated roofing
- 15° Roof pitch
- 10mm GIB wall lining
- 13mm GIB ceiling lining
- Hardieflex soffit lining
- Continuous external rainwater system & fascia with 80Ø downpipe, unless noted.
- All windows and doors double glazed (low Xcel)
- Grade A safety glazing in bathroom window and all full height ranch sliders inline with NZS 4223.

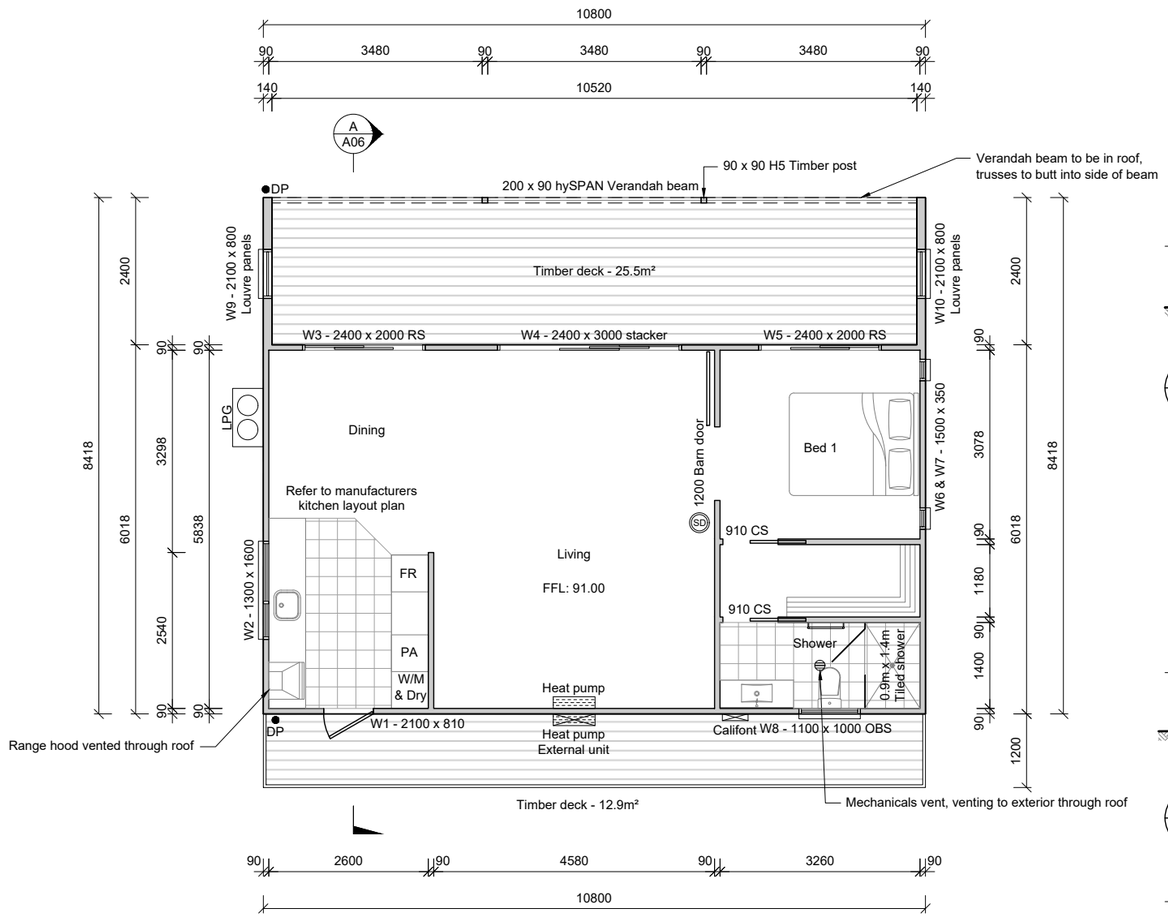
H1 SPECIFICATION:

- Subfloor Insulation Expol *R2.5*
- Walls: Pink batts *R2.2*
- Double glazing low E Xcel *R0.37*
- Ceiling: Pink batts *R4.5*

H1 calculations included in BC information.

SPECIFICATIONS	
Cladding Type	Vertical Corrugate
Stud Height	2610
Roofing Type	Corrugate
Roof Pitch	15°
Joinery	Aluminum
Wind Zone	High
Earth Quake Zone	1

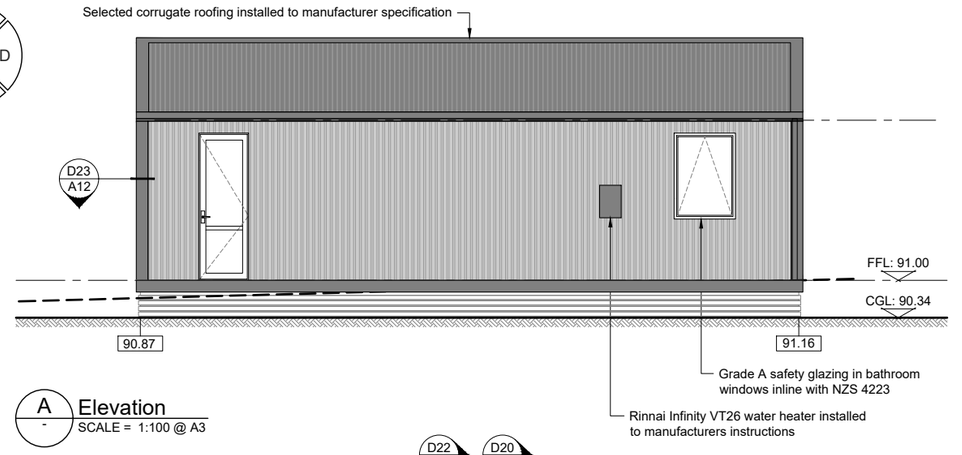
RISK MATRIX					
Risk Factor	L	M	H	VH	Score
A. Wind Zone	0	0	1	2	1
B. Number of Storeys	0	1	2	4	0
C. Roof / Wall Intersection	0	1	3	5	0
D. Eave Width	0	1	2	5	5
E. Envelope Complexity	0	1	3	6	0
F. Deck Design	0	2	4	6	0
	Total				6



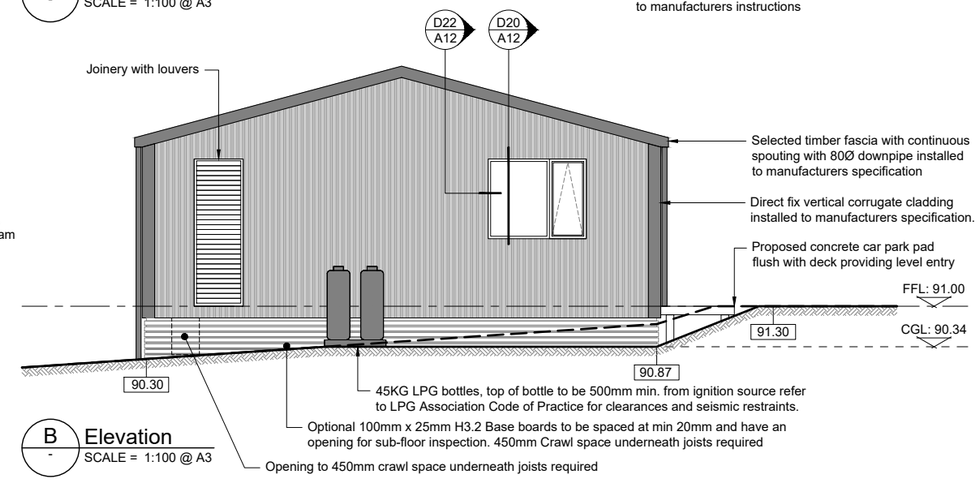
A Minor Dwelling Floor Plan
SCALE = 1:100 @ A3

LEGEND

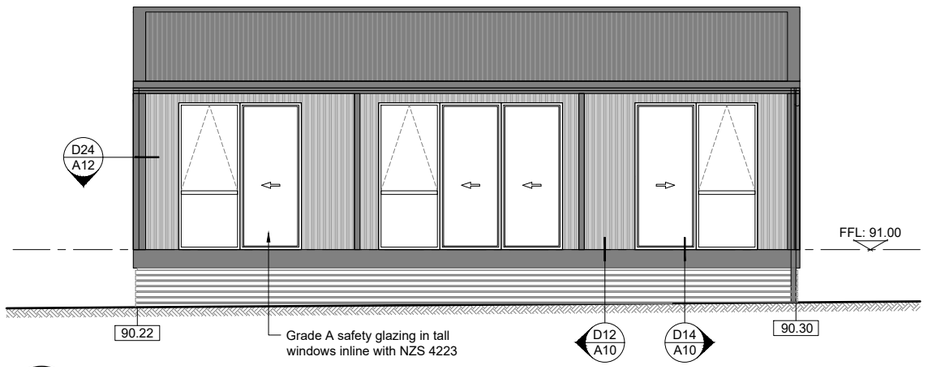
- Smoke Detector
- 90 x 45 SG8 H1.2 Timber framing walls
- Selected tiles on selected tile underlay to all wet areas installed to manufacturers specifications & Branz tiling good practice guide
- Rinnai Infinity VT26 water heater installed to manufacturers instructions
- 45KG LPG Bottles, top of bottle to be 500mm min. from ignition source refer to LPG Association Code of Practice for clearances and seismic restraints.



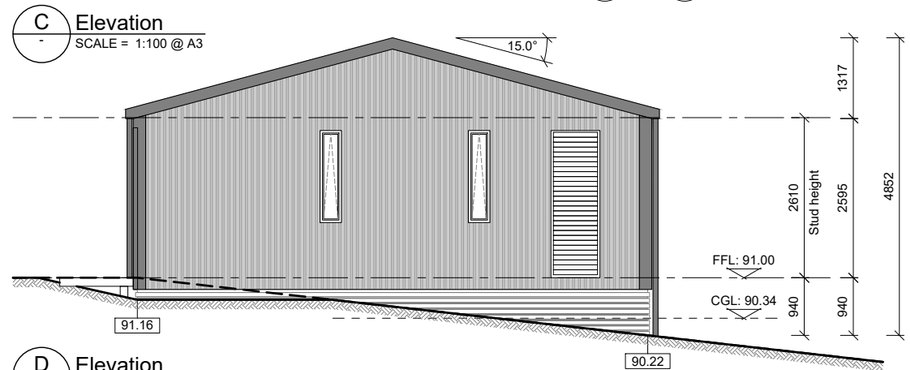
A Elevation
SCALE = 1:100 @ A3



B Elevation
SCALE = 1:100 @ A3



C Elevation
SCALE = 1:100 @ A3



D Elevation
SCALE = 1:100 @ A3

NOTE:

1. All dimensions taken from the outside of pre-cut, please check all dimensions before construction commences.
2. Refer to Section for stud.
3. Additional nogs to be installed at framing stage to allow for fixed shelves, , wall mounted extractors, heat pump, A/C units & garage door components where required.
4. Refer to attached sheet for cladding & roofing notes & details.
5. All wall framing typically H1.2 treated unless specifically stated.
6. All external linings to be installed to manufacturers instructions, refer to separate detail sheet for cladding details & notes.
7. Waterproof membrane under the tiles (or similar) is to extend 1.5m from bathroom & kitchen sanitary fixtures to comply with E3/AS1 3.0

BUILDING AREA:

Floor Area: 65.0m²
Roof Area: 108.2m²

FIXINGS:

Exposure Zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Floor Plan

Drawn 6 June 2024

Project No 4148

Rev H

Sheet A02

Scale (A3 Original) 1: 100
1 0.5 0 1 2 m

DIMENSION NOTE:

All dimensions shown in italic to centre line of pile

LEGEND

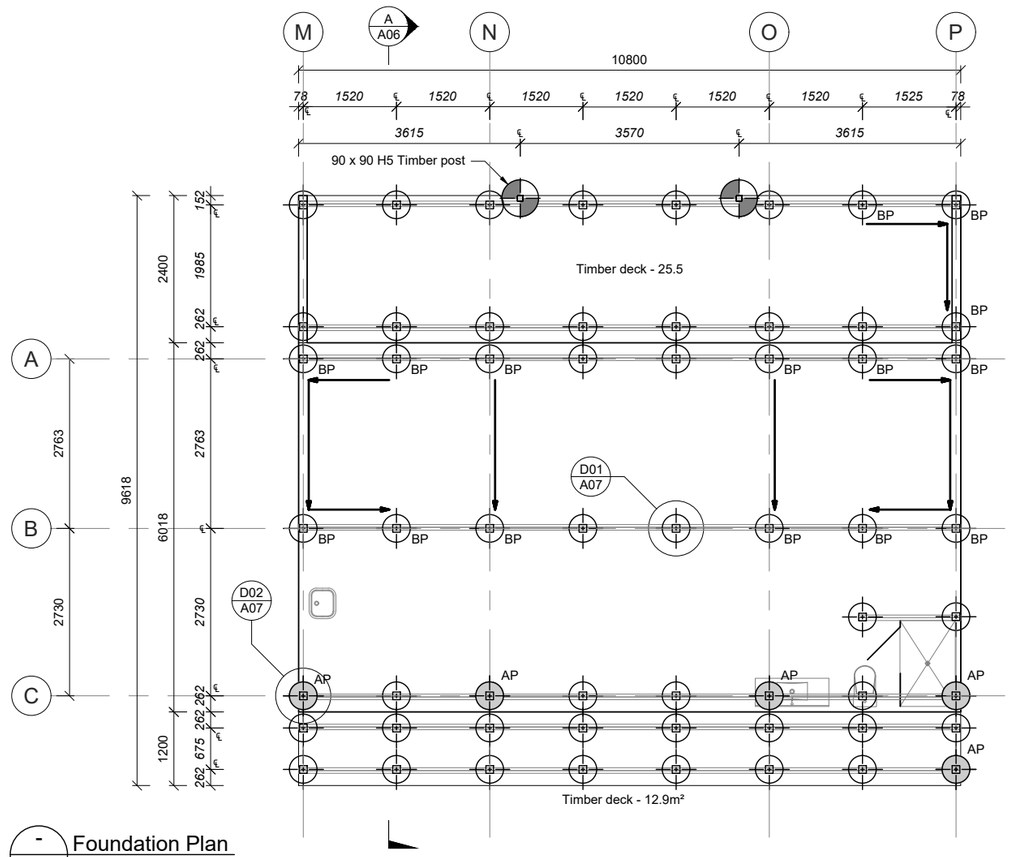
125 x 125 H5 ordinary timber pile. 450Ø footing with a minimum embedment of 0.9m below finished ground level and a minimum of 0.3m into very stiff natural ground, whichever is deeper.

AP 125 x 125 H5 Anchor pile cast in 450 diameter bored concrete pile set min. 0.9m below FGL and min. 0.3m into very stiff natural ground, which is deeper.

BP 125 x 125 H5 Braced pile cast in 450 diameter bored concrete pile set min. 0.9m below FGL and min. 0.3m into very stiff natural ground, which is deeper.

Braced Pile (Arrow points up)

90 x 90 H5 Verandah post cast in 600 diameter bored concrete pile set min. 1.1m below FGL and min. 0.3m into very stiff natural ground, which is deeper.



Foundation Plan
SCALE = 1:100 @ A3

NOTE:

Subfloor bracing to deck to
NZS 3604:2011 7.4.2: & Table 5.8
Soil type E.

Large Deck
= 26m² x 15 / 2 x 0.5 = 97.5BUs min. in each direction.
= 2 x Brace / Anchor pile to comply with NZS 3604: 6.10
= 120 BU's in each direction

Small deck
= 13m² x 15 / 2 x 0.5 = 48.8BUs min. in each direction.
= 2 x Brace / Anchor pile to comply with NZS 3604: 6.10
120 BU's in each direction

FOUNDATION PLAN NOTES:

1. All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
2. Check all existing drain locations and all dimensions on site before construction.
3. Concrete to be a minimum of 20MPa at 28 days unless specifically stated.
4. Local Authority should inspect the earthworks, building platform construction and foundation, prior to the concrete being poured to ensure that the design criteria has been met.

JOIST LAYOUT PLAN NOTES:

1. Double joist to be used under all load bearing walls. A single joist to be located under Non-loadbearing walls containing bracing elements. Non-loadbearing walls without bracing elements to be located no more than 150mm from a single joist.
2. Solid blocking between joists through mid span and at 2.5m max c/c over joist support.
3. 20mm Particle board or Plywood flooring to all non-wet areas nail or screw fixed.
4. Hardies Secura or H3.2 ply flooring installed to manufacturers instructions with H1.2 Joists.
5. Expol R2.5 insulation between each joist.
6. 100mm x 25mm H3.2 Base boards to be spaced at min 20mm and have an opening for subfloor inspection (Optional).
7. Provide subfloor access, refer to elevations.

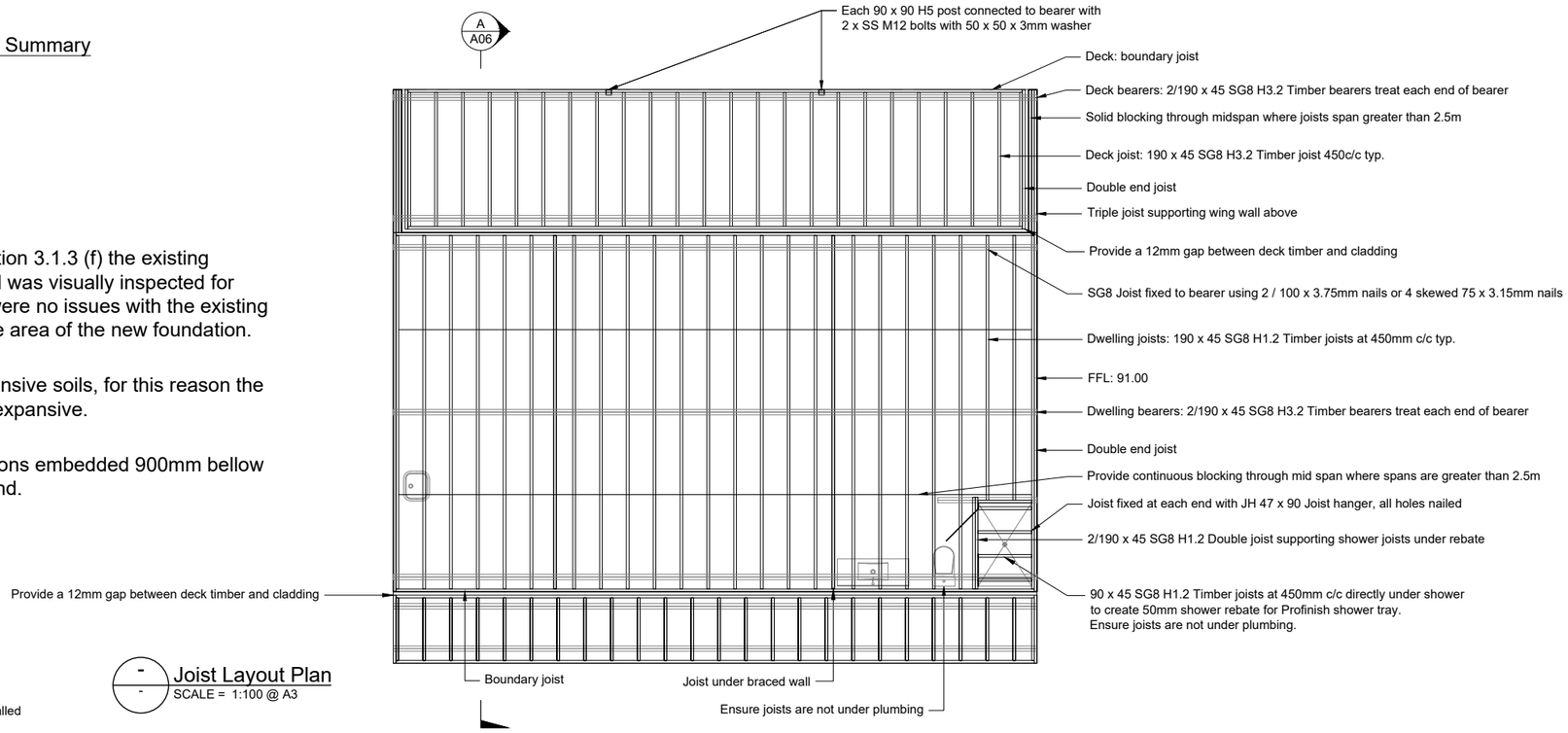
NZS 3604:2011 Site Requirements Summary

Exposure Zone:	C
Wind Zone:	High
Earthquake Zone:	1

In accordance with 3604:2011 Section 3.1.3 (f) the existing foundation and surrounding ground was visually inspected for subsidence and instability. There were no issues with the existing foundation and no signs of fill in the area of the new foundation.

There has been no testing for expansive soils, for this reason the soils have been classed as highly expansive.

Foundations are to be pile foundations embedded 900mm bellow existing ground level into firm ground.



Joist Layout Plan
SCALE = 1:100 @ A3

LEGEND

Hardies Secura interior flooring or 19mm Ply installed to manufacturers instructions with H1.2 Joists

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Foundation Plan
Subfloor Plan

Drawn 6 June 2024

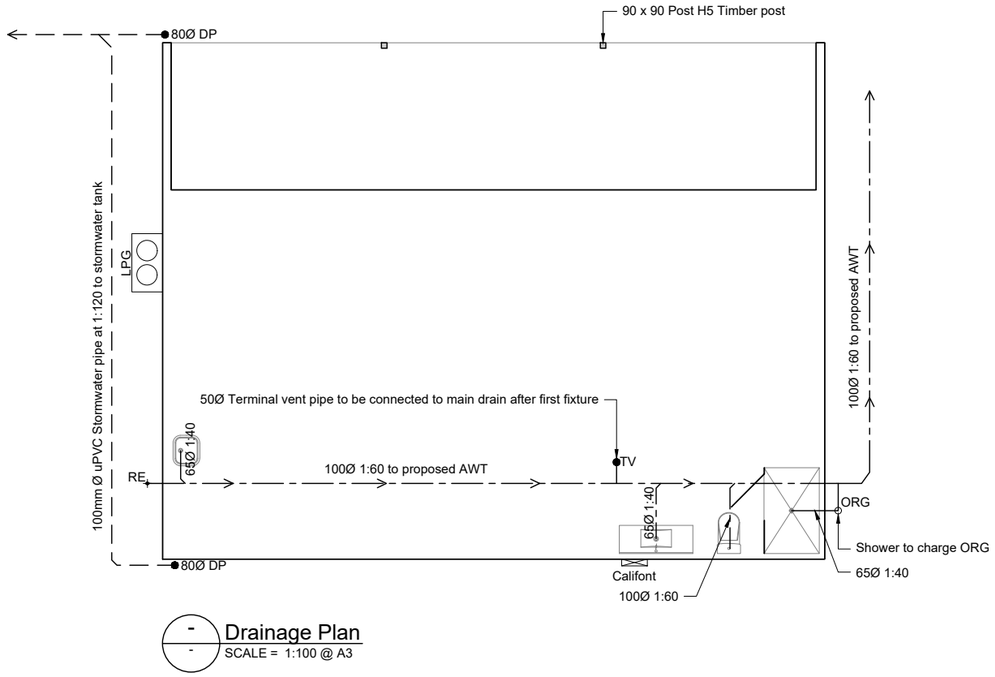
Project No 4148

Rev H

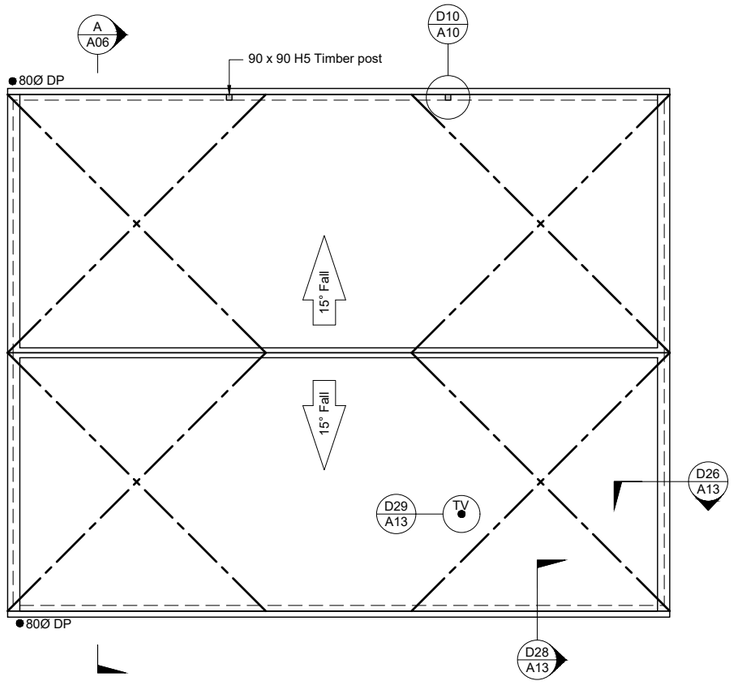
Sheet A03

Scale (A3 Original) 1: 100

1 0.5 0 1 2 m



Drainage Plan
SCALE = 1:100 @ A3



Roof Plan
SCALE = 1:100 @ A3

Waste Pipe Gradients (min)		
40Ø	1:40 Minimum Gradient	4DU
65Ø	1:40 Minimum Gradient	21DU
100Ø	1:60 Minimum Gradient	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 Gradient	25DU
85Ø	1:60 Minimum Gradient	61DU
100Ø	1:60 Minimum Gradient	205DU
150Ø	1:60 Minimum Gradient	1310DU
● TV	Terminal Vent	
● ORG	Overflow Relief Gully	
+ RE	Rodding Eye	
— - —— - —	Drainage - Waste Pipe	
- — — — — -	110mm Ø Stormwater Pipe	

NOTE:

1. All drainage is diagrammatical, drainlayer to determine on site drainage layout and provide asbuilt plan when complete.
2. Number of downpipes required as per NZBC E1/AS1 1 x 74mmØ downpipe per 70m² roof plan area.
3. Stormwater: 100mm Ø UPVC pipe, minimum gradient 1:120.
4. Timber fascia & Continuous spouting with 80Ø PVC downpipe with PVC spouting.
5. All drainage to comply with AS/NZS 3500 & NZBC G13/AS1.
6. Kitchen extractor hood to be vented to exterior.
7. Roofing to be installed to New Zealand Metal Roofing Code of Practice and in accordance with manufacturers installation instructions.

LEGEND

- Roof Line
- Load bearing stud
- TV● Terminal vent
- Lumberlok strip brace both ways in roof plane fixed using 5No. 30 x 3.15mm nails each end and 1No. 30 x 3.15mm nails where brace crosses truss

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanized steel. Closed wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

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Project Title
Andrew & Tina Syme
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Lot 1 DP 168917

Sheet Title
Drainage Plan
Roof Plan

Drawn 6 June 2024

Project No 4148

Rev H

Sheet A04

Scale (A3 Original) 1: 100

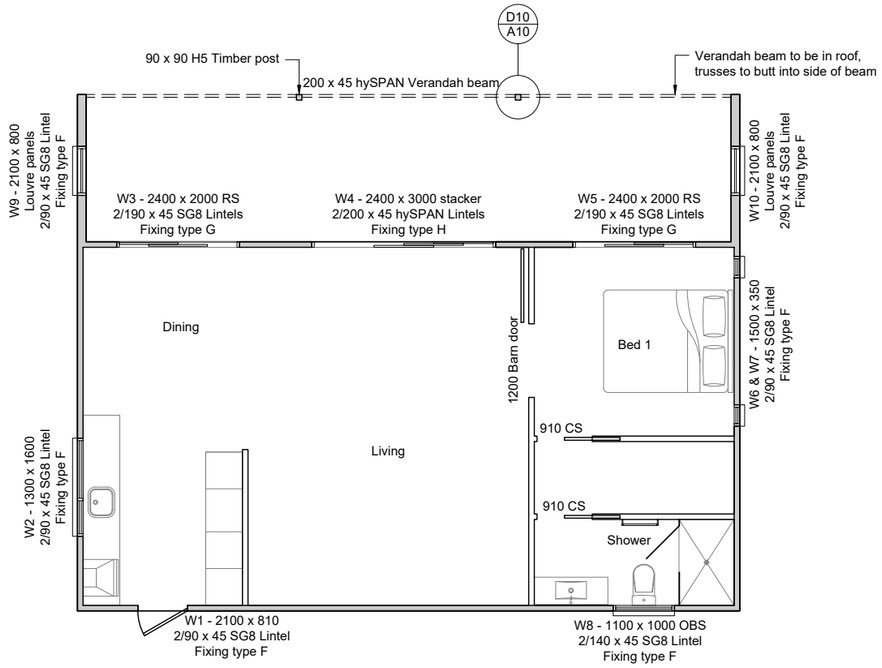
1 0.5 0 1 2 m

LEGEND

Load bearing - 2.4m high:90 x 45 SG8 H1.2 Timber framing to load bearing walls at 400 c/c

Non-load bearing - 90 x 45 SG8 H1.2 Timber framing to load bearing walls at 600 c/c

Unless specifically noted.



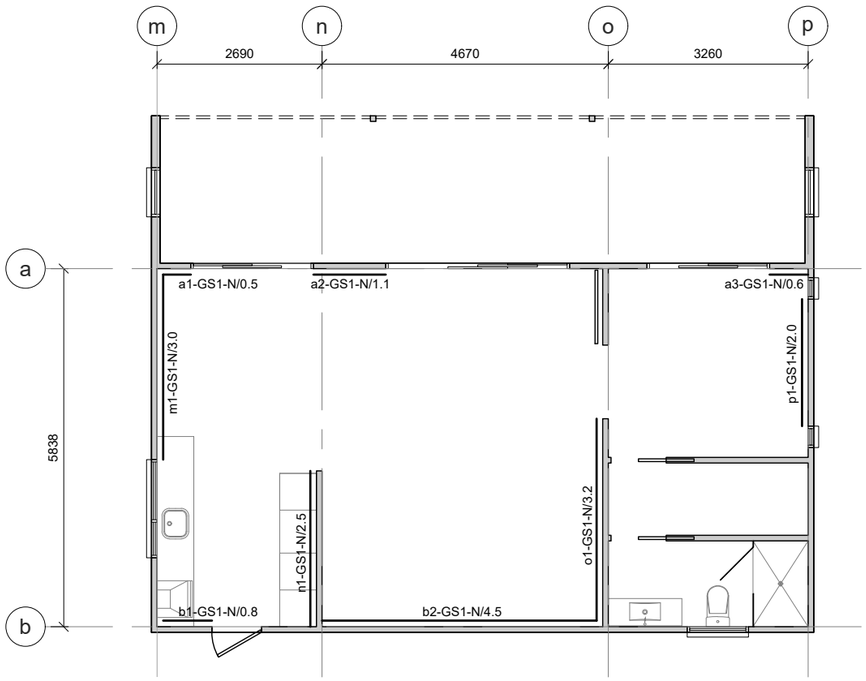
Framing & Lintel Plan
SCALE = 1:100 @ A3

NOTE:

1. All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
2. All bracing elements to be installed to manufacturers specifications.
3. Aqualine GIB to all bathroom walls.

WALL BRACING

GS1-N: 10mm GIB one face Min. 0.4m long, no hold downs.



Bracing Plan
SCALE = 1:100 @ A3

NOTE:

1. All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
2. Refer to NZS3604:2011 Section 4 for durability requirements.
2. Do not scale from drawings.
3. Check all dimensions before construction commences.
4. Refer to Eave detail for stud, lintel and soffit framing heights.
5. Precut manufacturer to provide truss and lintel fixings and Producer Statement.
6. Flashing materials must be selected based on environmental exposure, refer to NZS 3604 and Table 20 of NZBC clause E2/AS1.
7. Building underlay must comply with acceptable solution NZBC clause E2/AS1 and NZS 3604.
8. Sill support bars conforming to BRANZ evaluation method EM6 to be installed to all windows.
9. Flashing tape must have proven compatibility with the selected building underlay and other materials with which it comes into contact as per Table 21 of NZBC clause E2/AS1.
10. As per NZBC 9.1.10.8: Install windows & doors using pairs of min 75x3.15 jolt head nails through reveals into surrounding frame at
    a) 450mm max c/c along sills, jambs & heads
    b) 150mm max from ends of reveal Install packer between reveals & framing at all fixing points, except between head reveals & lintels.
11. All window joinery to comply with NZS 4211:2008
12. All glazing to comply with NZS 4223
13. All window and door openings to be checked on site prior to manufacture, any discrepancies to be reported to GJ Gardner Homes Ltd.
14. All internal doors to be offset from return walls by 90mm minimum.
15. Where studs exceed 450mm c/c install polypropylene tape horizontally at 300mm c/c over building wrap.

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Framing & Lintel Plan
Bracing Plan

Drawn 6 June 2024

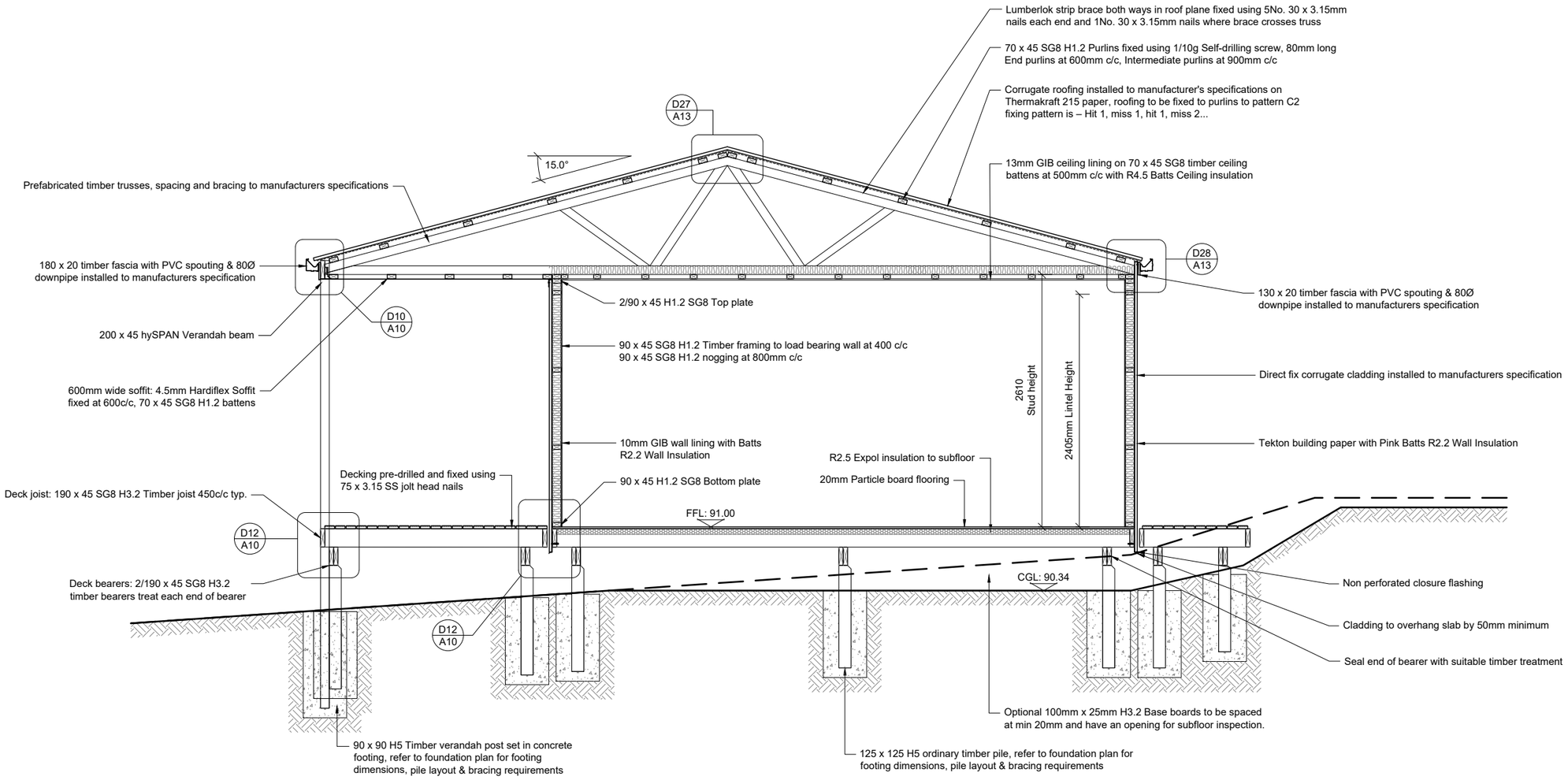
Project No 4148

Rev H

Sheet A05

Scale (A3 Original) 1: 100

1 0.5 0 1 2 m



A03 **A Section**
SCALE = 1:50 @ A3

SECTION NOTES:

1. Do not scale from drawings.
2. Local Authority should inspect the earthworks, building platform construction and foundation, prior to the concrete being poured to ensure that the design criteria has been met.
3. All wall framing typically H1.2 treated unless specifically stated.
4. Refer to Section for stud & lintel framing heights.
5. Additional nogs to be installed at framing stage to allow for towel rails, wardrobe & fixed shelves, WC cistern, toilet roll holders & wall mounted extractors.
6. Refer to Framing & Lintel Plan for lintel dimensions.
7. All wet areas to be provided with impervious linings as per NZBC E3/AS1.
8. Aqualine GIB to all bathroom walls.
9. Domestic smoke detectors to be installed in accordance with C AS1 & F7 ensure placement within 3m of bedroom doors.
6. Shower to be tiled with membrane, refer to manufacturers documentation.

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanized steel.
Closed wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Section A

Drawn 6 June 2024

Project No 4148

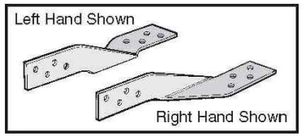
Rev H

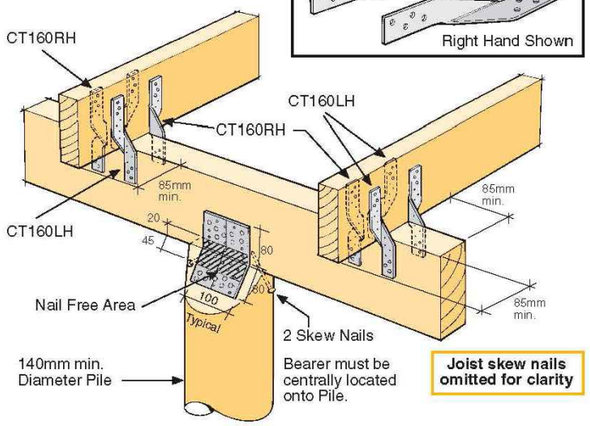
Sheet A06

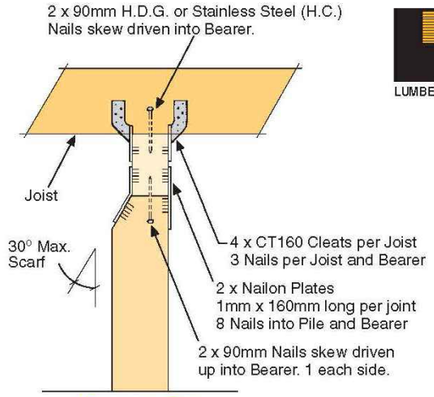
Scale (A3 Original) 1: 50

0.5 0.25 0 0.5 1 m

External Bracing Line

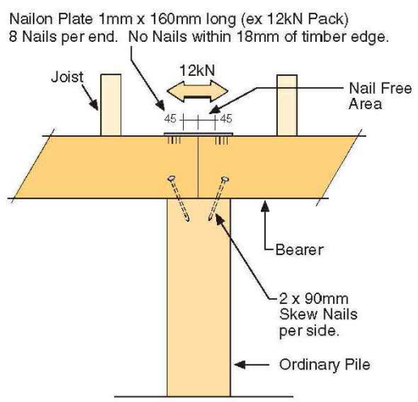




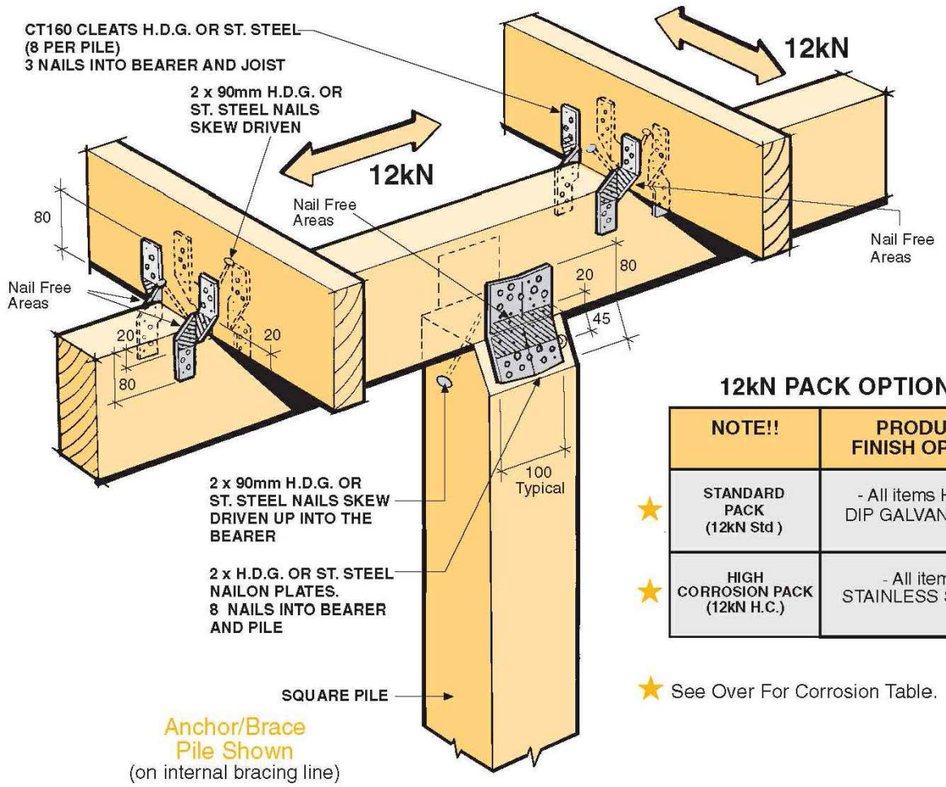


Square Pile

CORROSION HAZARD USE TABLE	
Standard Pack (12kN Std) - Zones B & C - All Fixings ABOVE 600mm from Ground level	All items Hot Dip Galvanised.
High Corrosion Pack (12kN HC) - Zone D - All Fixings BELOW 600mm from Ground level	All items Stainless Steel (304).



12kN Bearer Splice

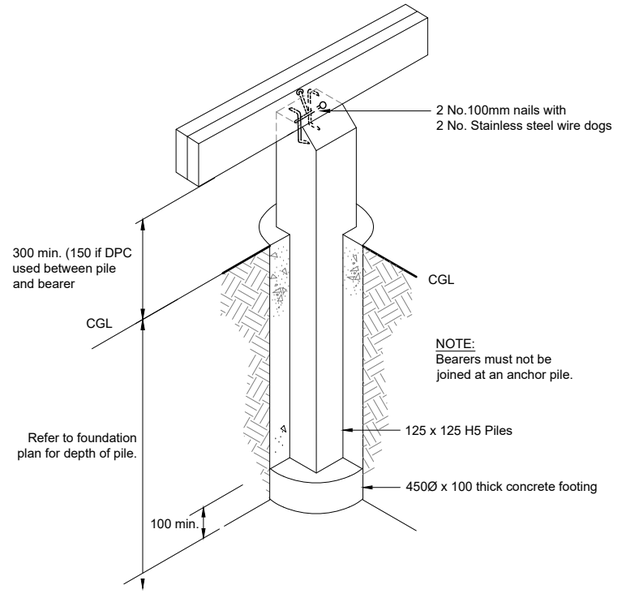


Anchor/Brace Pile Shown
(on internal bracing line)

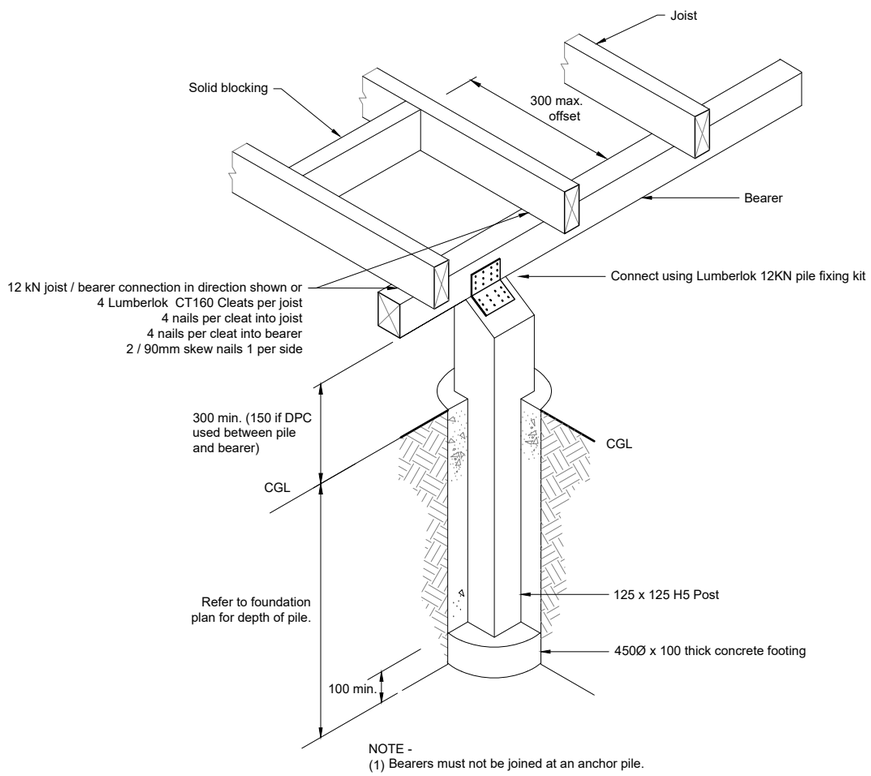
12kN PACK OPTIONS

NOTE!!	PRODUCT FINISH OPTIONS
★ STANDARD PACK (12kN Std)	- All items HOT DIP GALVANISED
★ HIGH CORROSION PACK (12kN H.C.)	- All items STAINLESS STEEL

★ See Over For Corrosion Table.



D01 A03 Ordinary Pile Detail
SCALE = NTS



NOTE -
(1) Bearers must not be joined at an anchor pile.

D02 A03 Anchor Pile Detail
SCALE = NTS

NOTE:

1. Check all existing drain locations and all dimensions on site before construction.
2. Concrete to be a minimum of 20Mpa at 28 days unless specifically stated.
3. Local Authority should inspect the earthworks, building platform construction and foundation, prior to the concrete being poured to ensure that the design criteria has been met.
4. All exposed fixing or fixings within 600mm of finished ground level to be stainless steel.
5. Solid blocking between joists through mid span and at 2.5m max c/c over joist support.

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Fixings within 600mm of finished ground level to be 304 stainless steel.
Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanized steel.
Closed wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Foundation Details

Drawn 6 June 2024

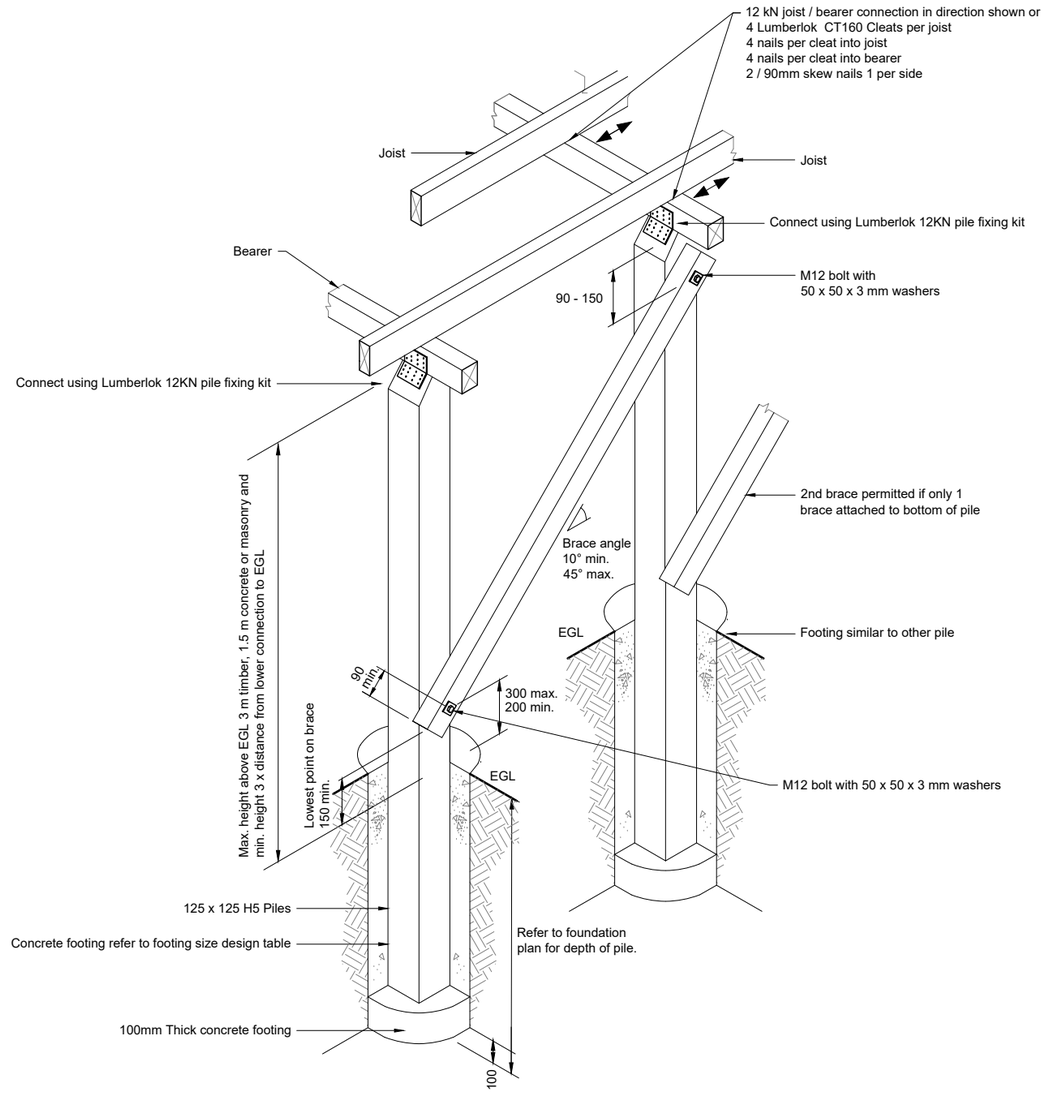
Project No 4148

Rev H

Sheet A07

Scale (A3 Original) 1: 20

0.2 0.1 0 0.2 0.4 m



D03 / A03 Pile to Pile Brace Detail
SCALE = NTS

Bracing units (along line of bracing)	
Wind	160
Earthquake	120

Braces	
Brace size	Max. length
100 x 75 H3.2	3.0 m
100 x 100 H3.2	5.0 m

NOTE:

1. Check all existing drain locations and all dimensions on site before construction.
2. Concrete to be a minimum of 20MPa at 28 days unless specifically stated.
3. Local Authority should inspect the earthworks, building platform construction and foundation, prior to the concrete being poured to ensure that the design criteria has been met.
4. All exposed fixing or fixings within 600mm of finished ground level to be stainless steel.
5. Solid blocking between joists through mid span and at 1.8m max c/c over joist support.

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Fixings within 600mm of finished ground level to be 304 stainless steel.
Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be type 304 stainless steel.
Closed in nail plates in roof space to be continuous coated galvanized steel.
Closed in wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Foundation Details

Drawn 6 June 2024

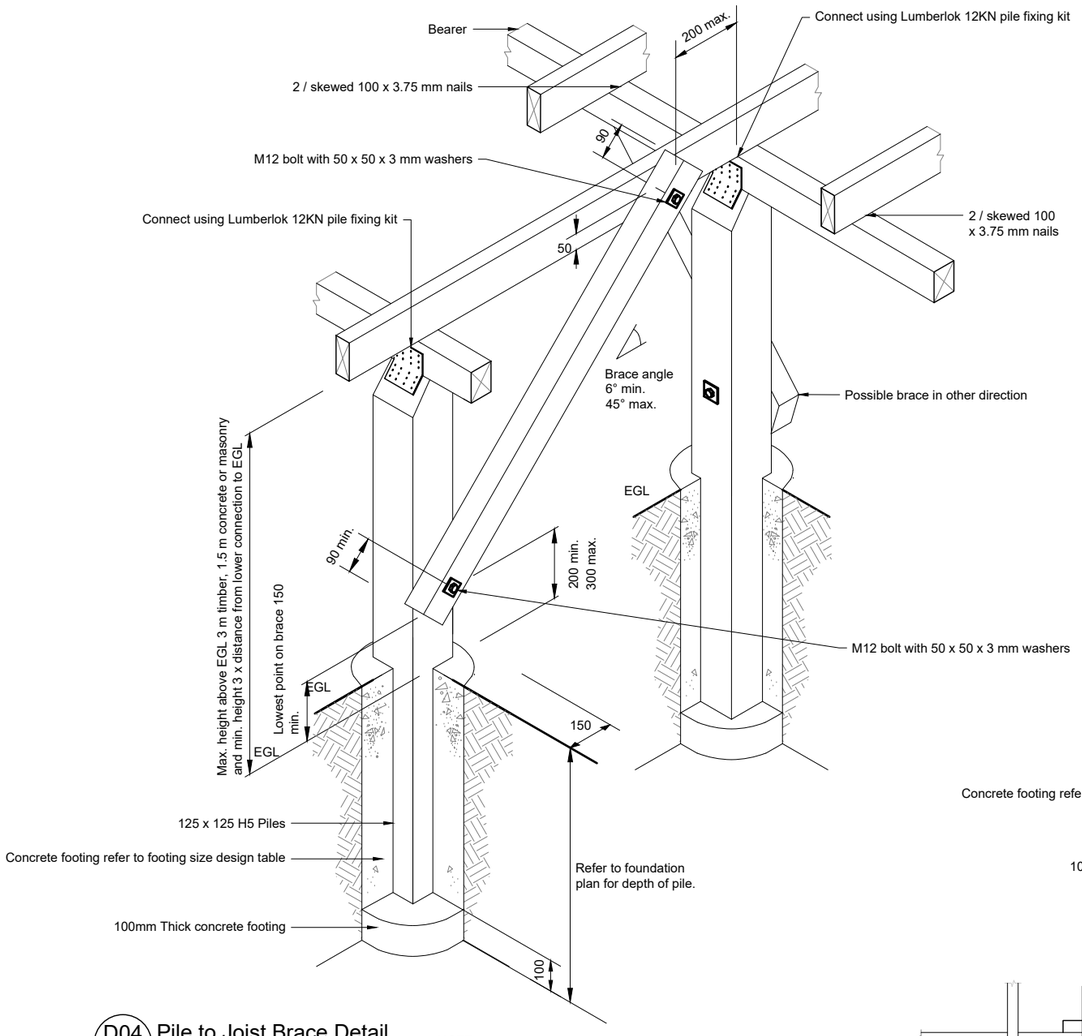
Project No 4148

Rev H

Sheet A08

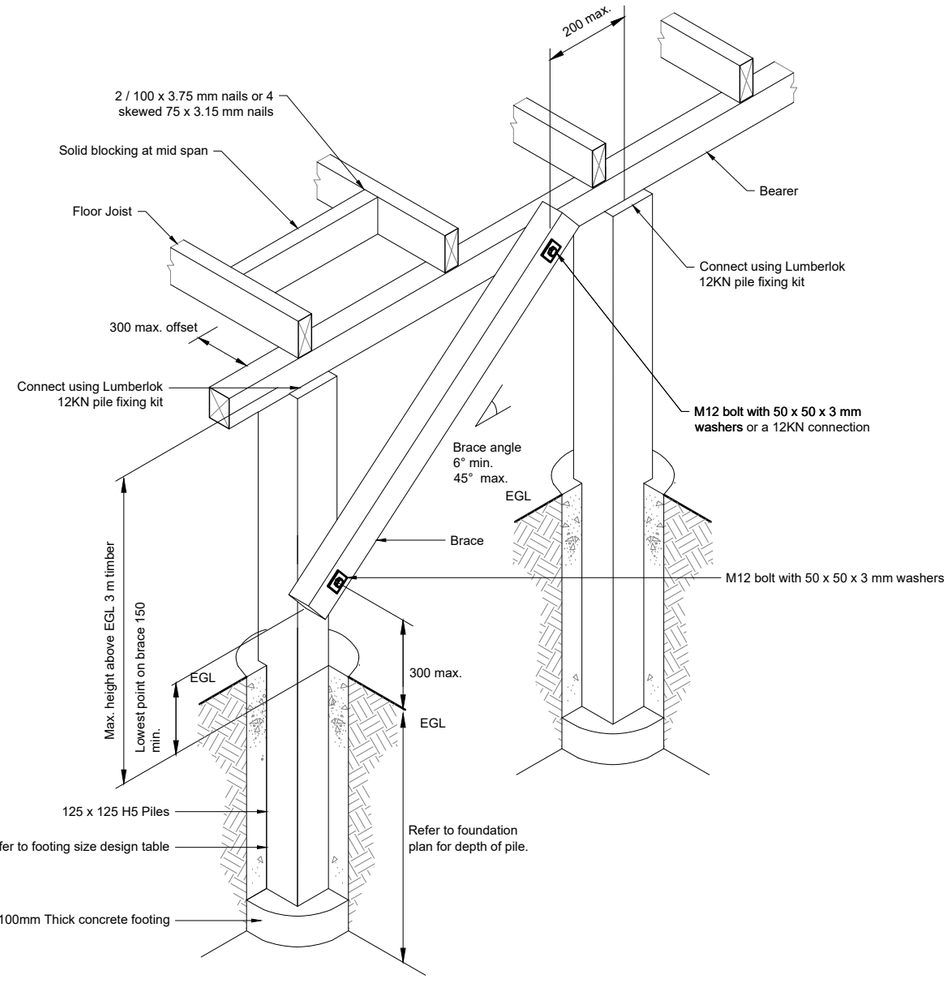
Scale (A3 Original) 1: 20

0.2 0.1 0 0.2 0.4 m



D04 A03 Pile to Joist Brace Detail
SCALE = NTS

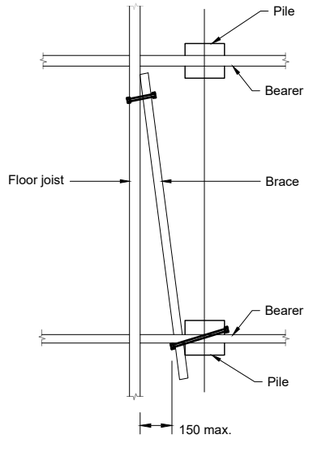
NOTE -
(1) EGL = Existing ground level.
(2) See section 4 for durability requirements.
(3) Both piles are braced piles.



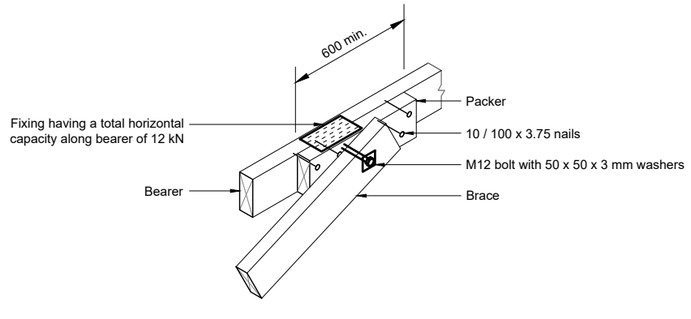
D05 A03 Pile to Brearer Brace Detail
SCALE = NTS

Bracing units (along line of bracing)	
Wind	160
Earthquake	120

Braces (refer 6.8.3.3)	
Brace size	Max. length
100 x 75 H3.2	3.0 m
100 x 100 H3.2	5.0 m



OFFSET BRACE DETAIL
(plan view)



PACKER DETAIL

NOTE:

1. Check all existing drain locations and all dimensions on site before construction.
2. Concrete to be a minimum of 20MPa at 28 days unless specifically stated.
3. Local Authority should inspect the earthworks, building platform construction and foundation, prior to the concrete being poured to ensure that the design criteria has been met.
4. All exposed fixing or fixings within 600mm of finished ground level to be stainless steel.
5. Solid blocking between joists through mid span and at 1.8m max c/c over joist support.

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Fixings within 600mm of finished ground level to be 304 stainless steel.
Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be type 304 stainless steel.
Closed in nail plates in roof space to be continuous coated galvanized steel.
Closed in wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Foundation Details

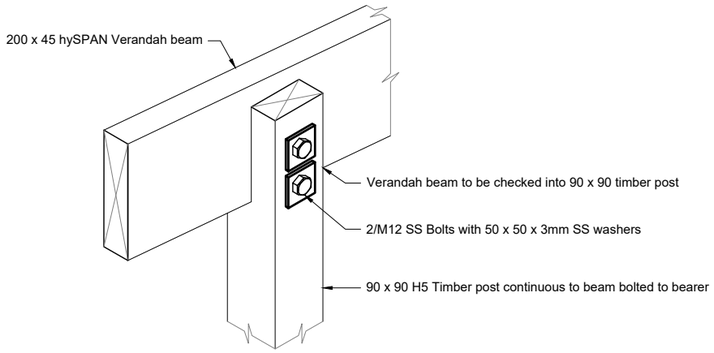
Drawn 6 June 2024

Project No 4148

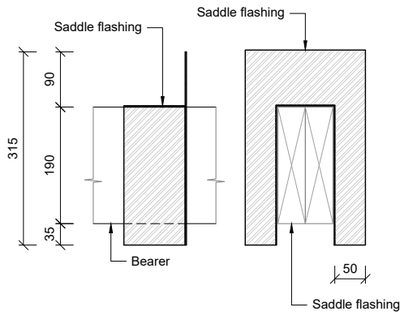
Rev H

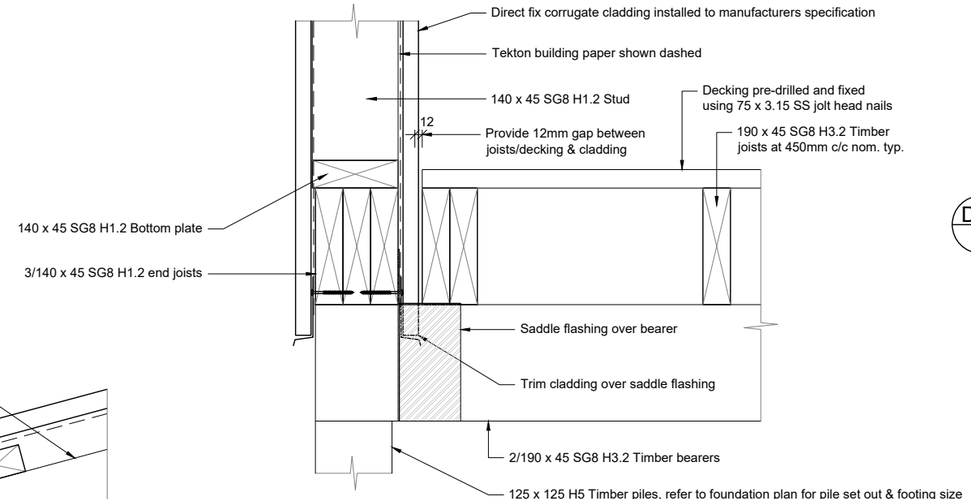
Sheet A09

Scale (A3 Original) 1: 20
0.2 0.1 0 0.2 0.4 m

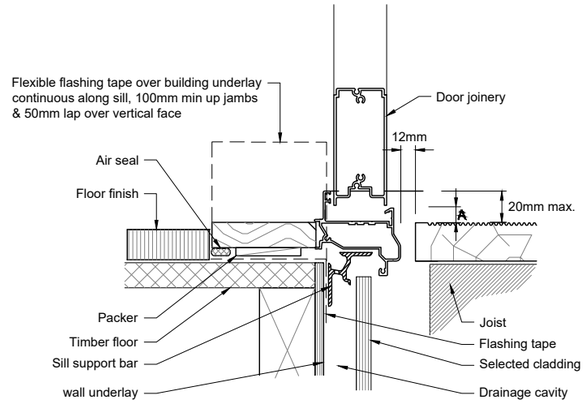


D10 Verandah Beam to Post Connection Detail
A06 SCALE = 1:10 @ A3

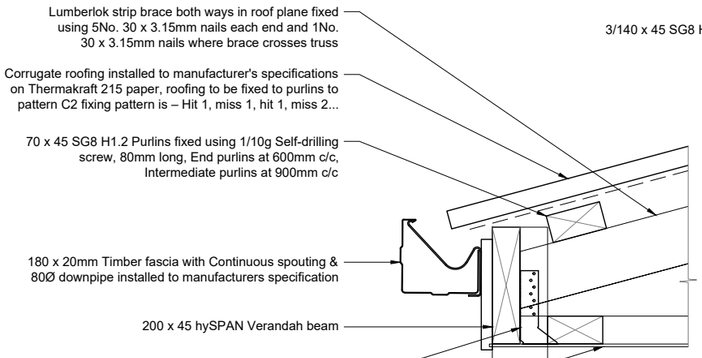


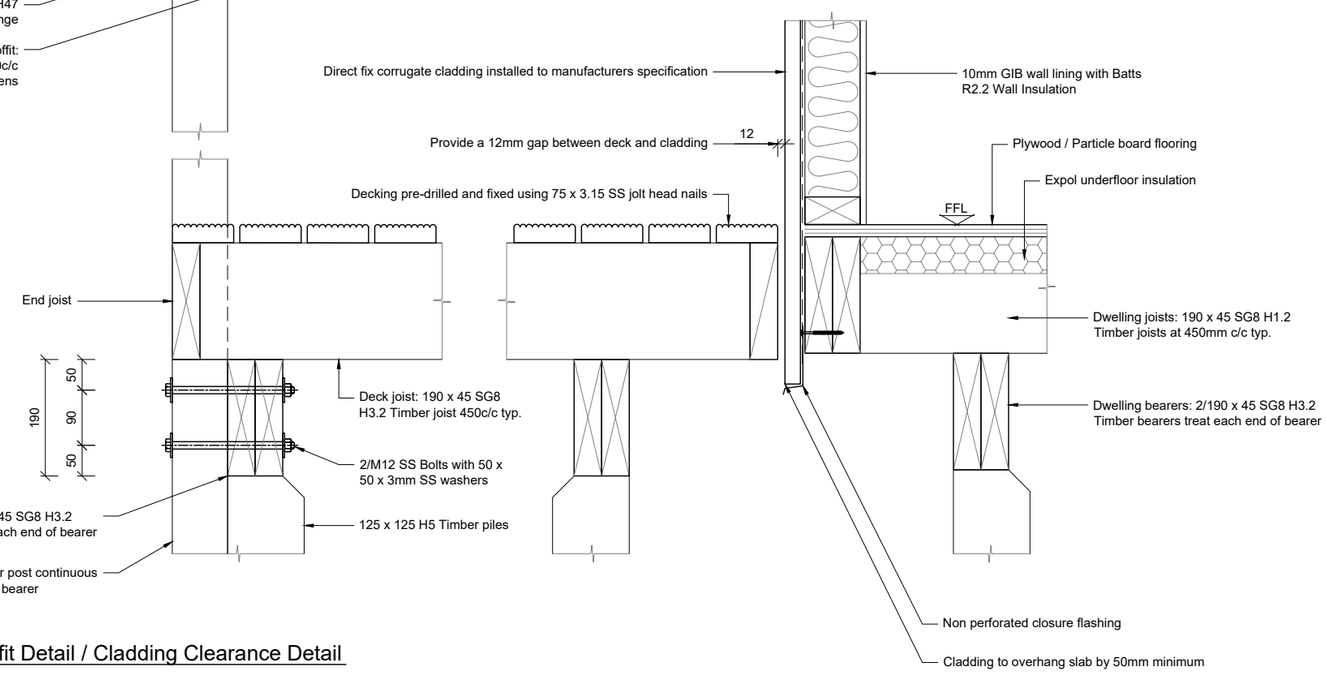


D11 Wing Wall Bearer/Joist with Saddle Flashing Detail
A06 SCALE = 1:10 @ A3



D14 Door Sill at Timber Deck Detail
- SCALE = 1:5 @ A3





D12 Post to Bearer & Soffit Detail / Cladding Clearance Detail
A06 SCALE = 1:10 @ A3

NOTE

1. All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
2. Verify all dimensions on site before commencing work.
3. Check all existing drain locations and all dimensions on site before construction.
4. Concrete to be a minimum of 20MPa at 28 days.
5. Local Authority should inspect the earthworks, building platform construction and foundation, prior to the concrete being poured to ensure that the design criteria has been met.

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Fixings within 600mm of finished ground level to be 304 stainless steel.
Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanized steel.
Closed wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Verandah Details

Drawn 6 June 2024

Project No 4148

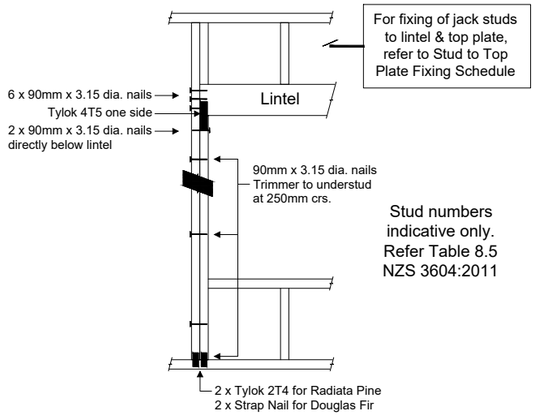
Rev H

Sheet A10

Scale (A3 Original) 1: 10
0.1 0.05 0 0.1 0.2 m

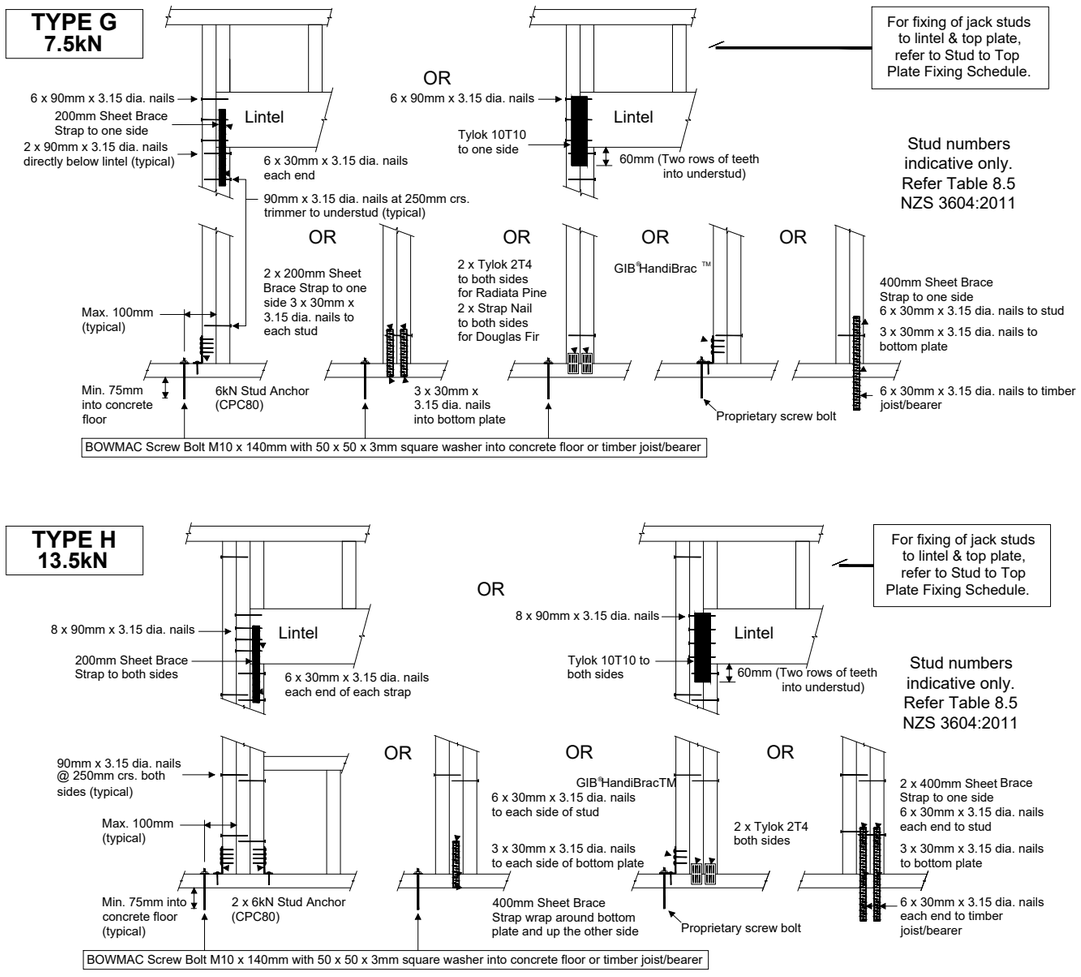
CONVENTIONAL LINTEL FIXING OPTIONS

TYPE F 4.0kN



Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

TYPE G 7.5kN



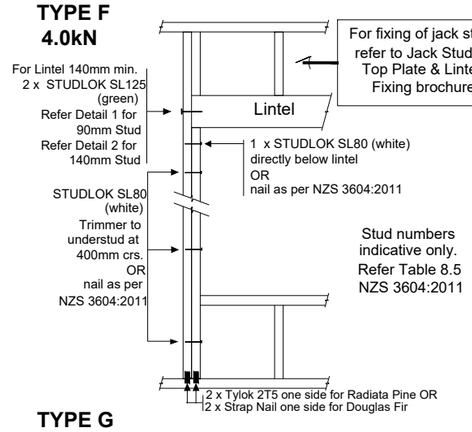
Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

TYPE H 13.5kN

D15 - Lintel Fixing Details
SCALE = NTS

STUDLOK LINTEL FIXING OPTIONS FOR ON-SITE

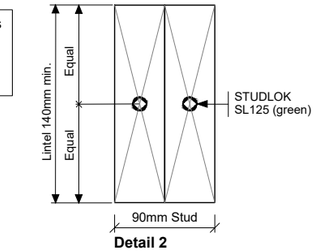
TYPE F 4.0kN



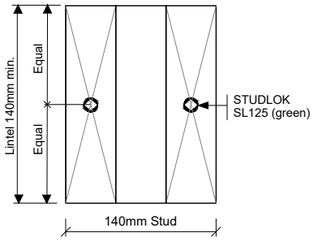
Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

TYPE G

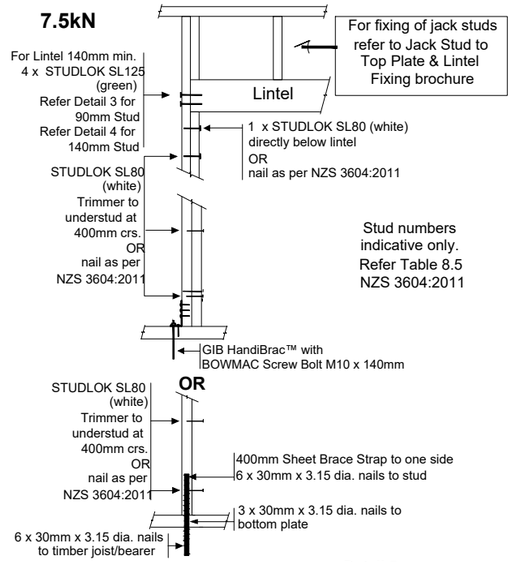
Detail 1



Detail 2

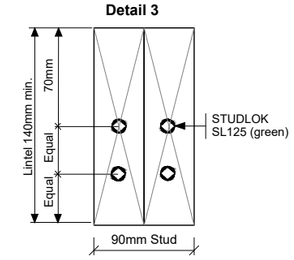


7.5kN

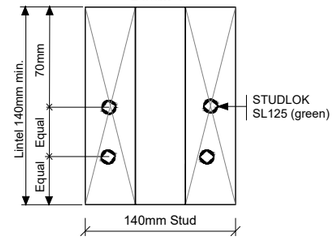


Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

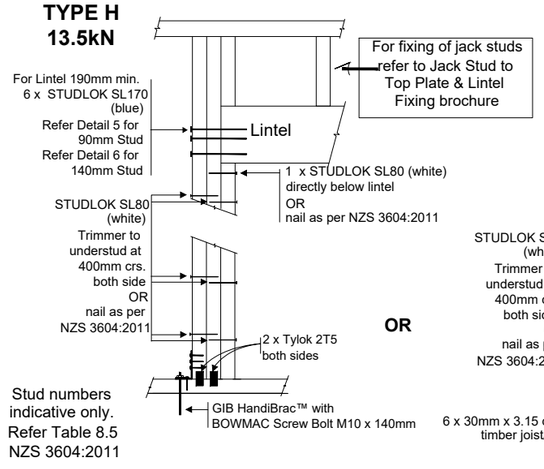
Detail 3



Detail 4

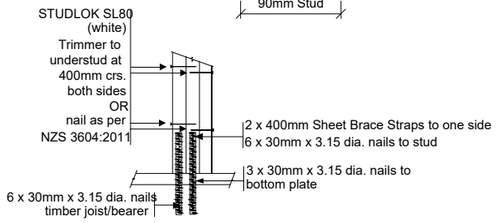


TYPE H 13.5kN

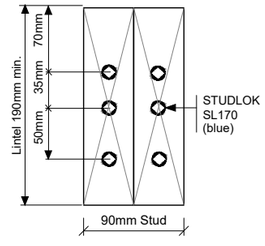


Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

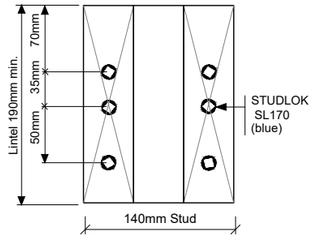
OR



Detail 5



Detail 6



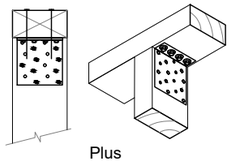
TOP PLATE CONNECTION OPTIONS:
Choose from the three connections below or refer to manufacturers information in specifications for Bowmac Stud-lok fixing

NOTE:

To calculate the number of B type fixings required, divide the wall length by the stud centres, add 1 to this figure and locate this number of fixings as evenly as possible along the wall length. This figure includes the start and end studs in each wall length.

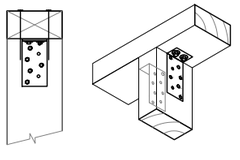
FIXING TYPE B: 4.7KN — CHOOSE ANY OF THE 3 OPTIONS BELOW

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



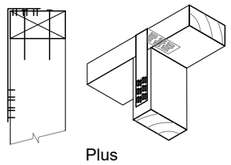
Plus
LUMBERLOK
6kN Stud Anchor
(CPC80)

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus
2 x LUMBERLOK
CPC40

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus
LUMBERLOK
Stud Strap
(one face only)

Recommended for internal wall options to avoid lining issues

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Project Title
Andrew & Tina Syme
23 Koropewa Road
Kerikeri
Lot 1 DP 168917

Sheet Title
Hold Down Details

Drawn 6 June 2024

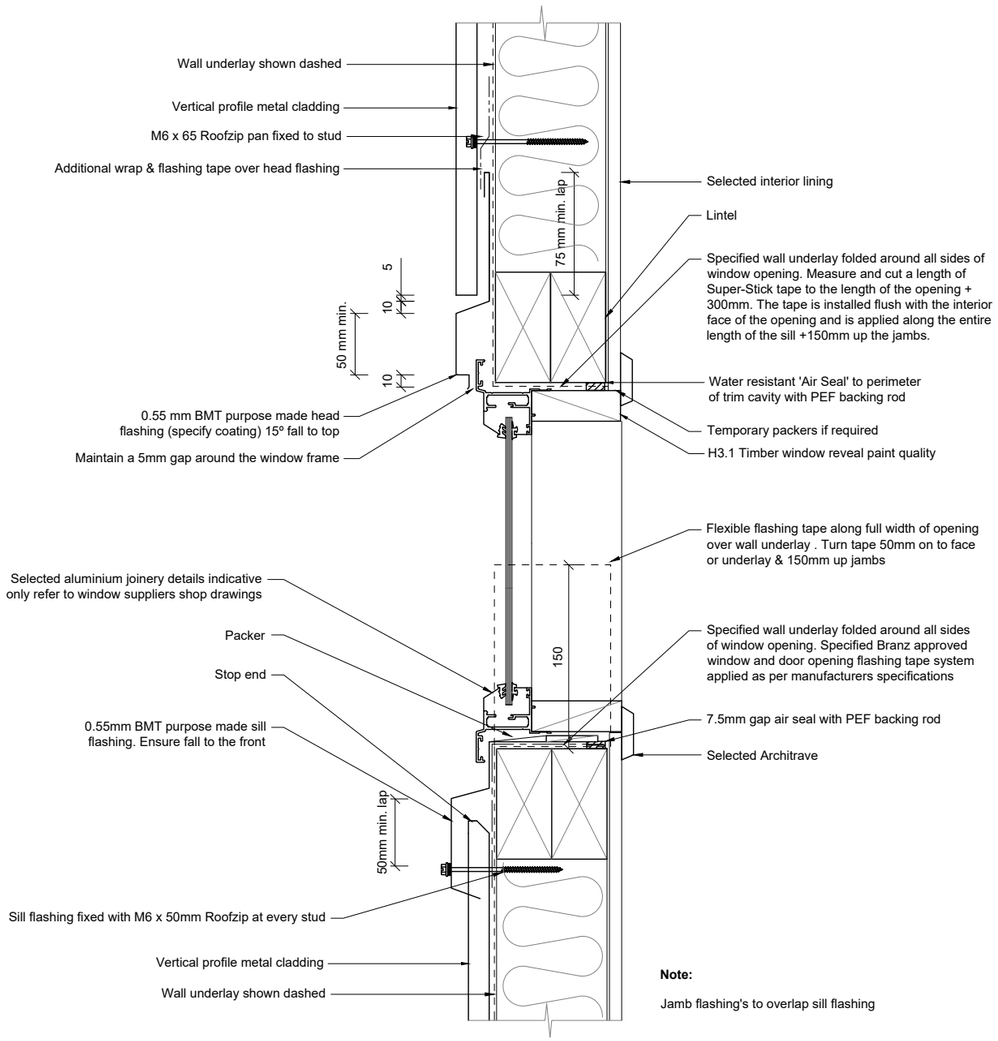
Project No 4148

Rev H

Sheet A11

Scale (A3 Original) 1: 10

0.1 0.05 0 0.1 0.2 m

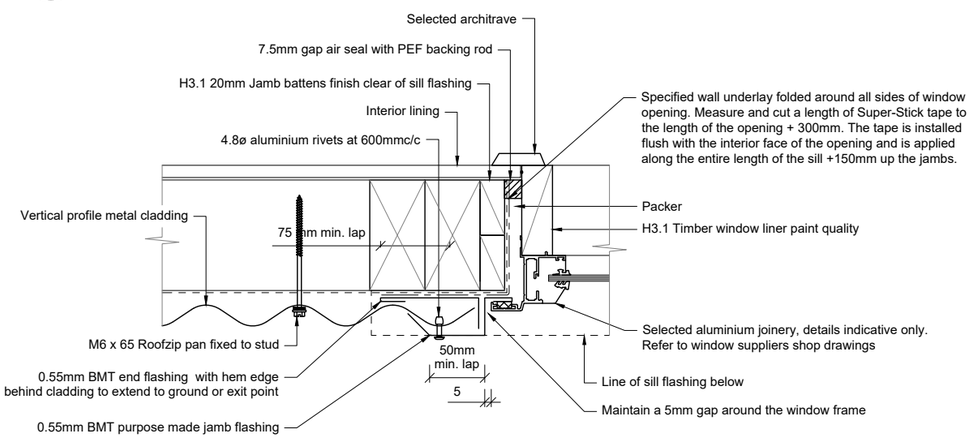


Note:

Jamb flashing's to overlap sill flashing

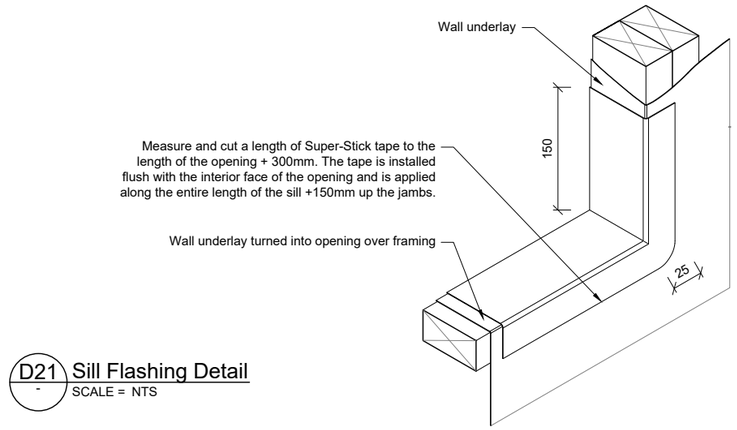
D20 Vertical Profile Metal Cladding Sill & Head Flashing Detail

A02 SCALE = 1:5 @ A3



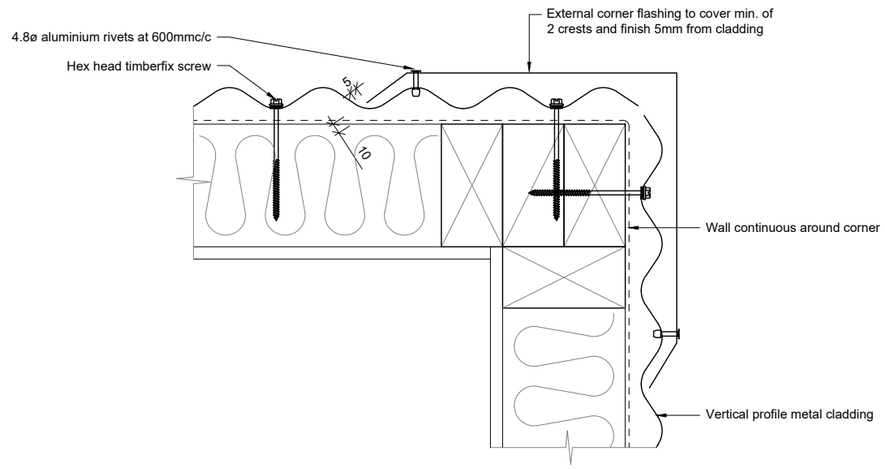
D22 Vertical Vertical Profile Metal Cladding Head Flashing Detail

A02 SCALE = 1:5 @ A3



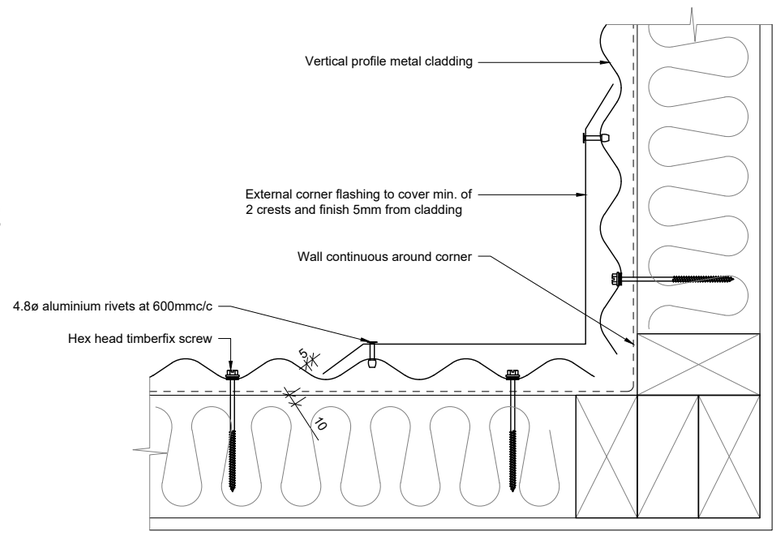
D21 Sill Flashing Detail

SCALE = NTS



D23 Vertical Profile Metal Cladding External Corner Details

A02 SCALE = 1:5 @ A3



D24 Vertical Profile Metal Cladding Internal Corner Details

A02 SCALE = 1:5 @ A3

NOTE:

1. Refer to NZS3604:2011 Section 4 for durability requirements.
2. Flashing materials must be selected based on environmental exposure, refer to NZS 3604 and Table 20 of NZBC clause E2/AS1.
3. Building underlay must comply with acceptable solution NZBC clause E2/AS1 and NZS 3604.
4. Flashing tape must have proven compatibility with the selected building underlay and other materials with which it comes into contact as per Table 21 of NZBC clause E2/AS1.
5. As per NZBC 9.1.10.8: Install windows & doors using pairs of min 75x3.15 jolt head nails through reveals into surrounding frame at
   a) 450mm max c/c along sills, jambs & heads
   b) 150mm max from ends of reveal
   Install packers between reveals & framing at all fixing points, except between head reveals & lintels.
6. All window joinery to comply with NZS 4211:2008
7. All glazing to comply with NZS 4223
8. All window and door openings to be checked on site prior to manufacture, any discrepancies to be reported to the Designer.
9. Details to be read in conjunction with manufacturers installation instruction.

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanized steel. Closed wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

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Project Title

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Lot 1 DP 168917

Sheet Title

Cladding Details

Drawn 6 June 2024

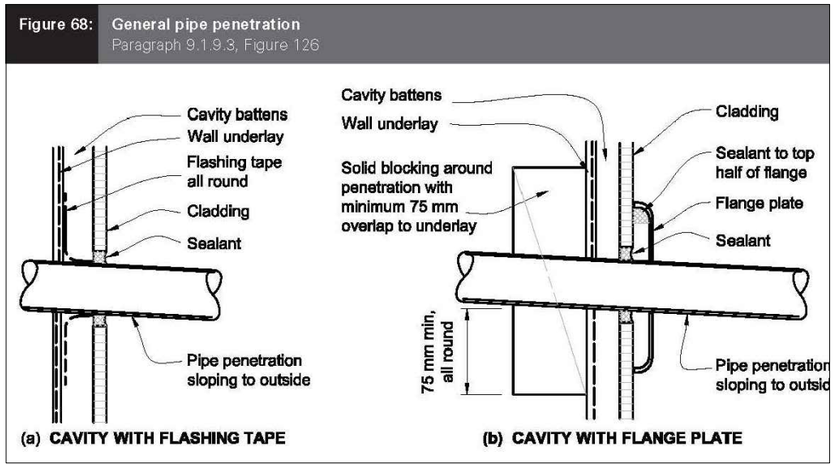
Project No 4148

Rev H

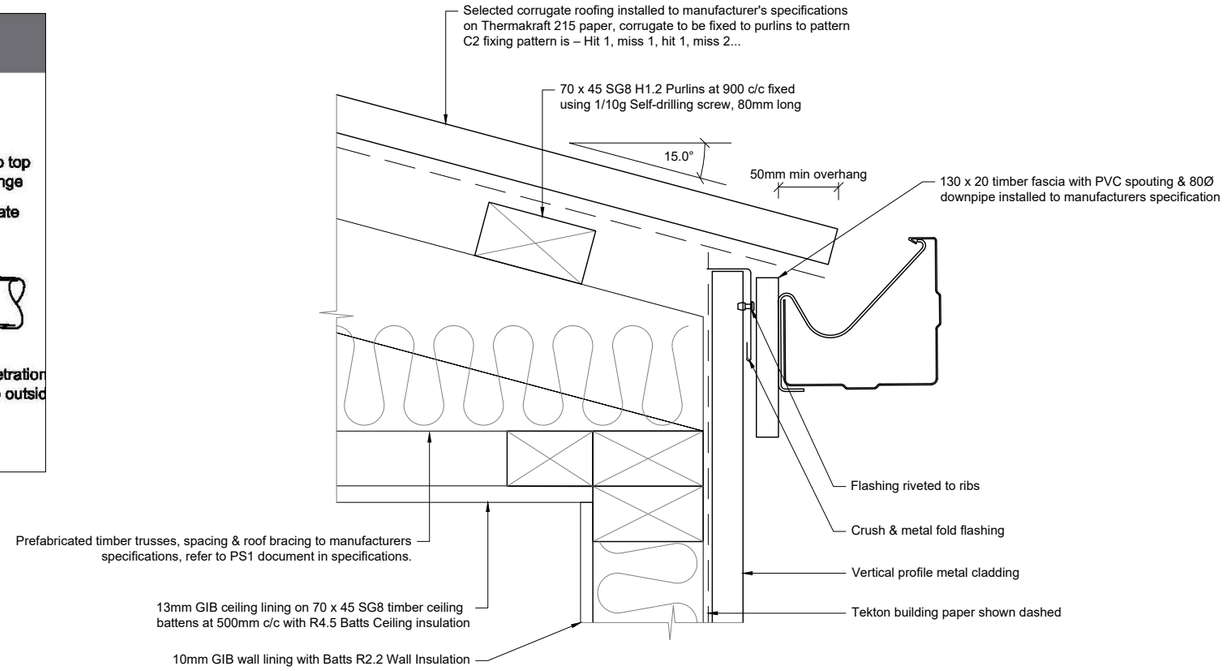
Sheet A12

Scale (A3 Original) 1: 5

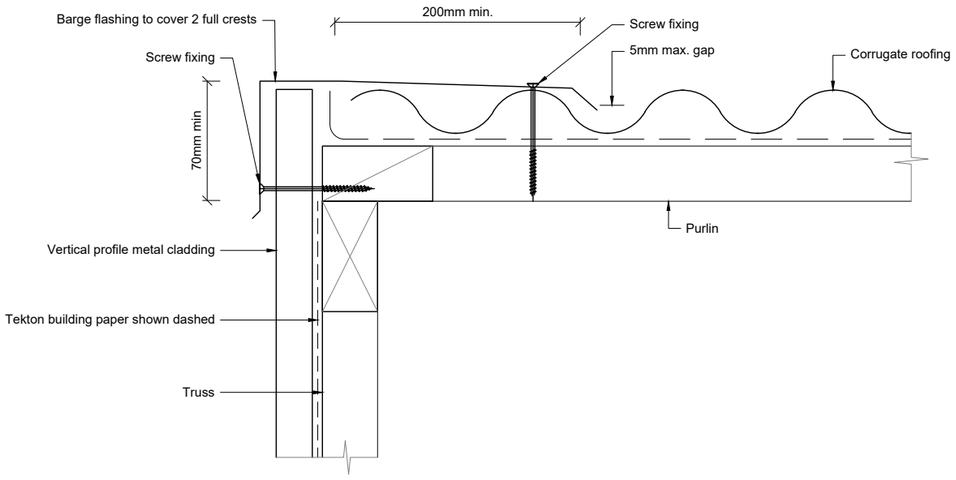
0.05 0.03 0 0.05 0.1 m



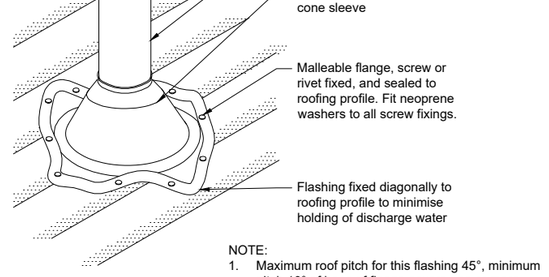
D25 Penetration Detail
SCALE = 1:5 @ A3



D28 Eave Detail
A06 SCALE = 1:10 @ A3

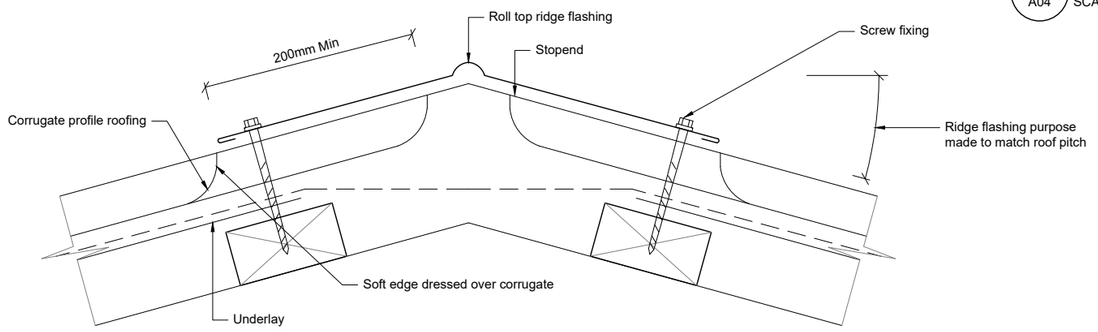


D26 Gable End Flashing Detail
A02 SCALE = 1:10 @ A3



NOTE:
1. Maximum roof pitch for this flashing 45°, minimum pitch 10° of base of flange covers one or more complete troughs.
2. For pipes up to 85mm diameter.

D29 Vent Flashing Detail
A04 SCALE = 1:10 @ A3



D27 Ridge Flashing Detail
A06 SCALE = 1:10 @ A3

NOTE:
1. All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
2. Refer to NZS3604:2011 Section 4 for durability requirements.
3. Do not scale from drawings.
4. All wall framing typically H1.2 treated unless specifically stated.
5. All roofing to be installed to New Zealand Metal Roofing Code of Practice and in accordance with manufacturers installation instructions.
6. Precut manufacturer to provide truss fixings and Producer Statement.
7. Refer to Framing & Lintel Plan for lintel to stud fixings.
8. Details to be read in conjunction with manufacturers specifications and installation requirements.

FIXINGS

Exposure zone: C
Durability of fixings to comply with NZS 3604:2011 Section 4 & NZBC B2/AS1

Exposed fixings to be type 304 stainless steel.
Sheltered fixings to be hot-dipped galvanize.
Closed in nail plates in roof space to be continuous coated galvanized steel.
Closed wire dogs and bolts to be hot dipped galvanized steel.
All other closed structural fixings to be mild steel (uncoated non galvanized)

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Project Title
Andrew & Tina Syme
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Sheet Title
Cladding Details

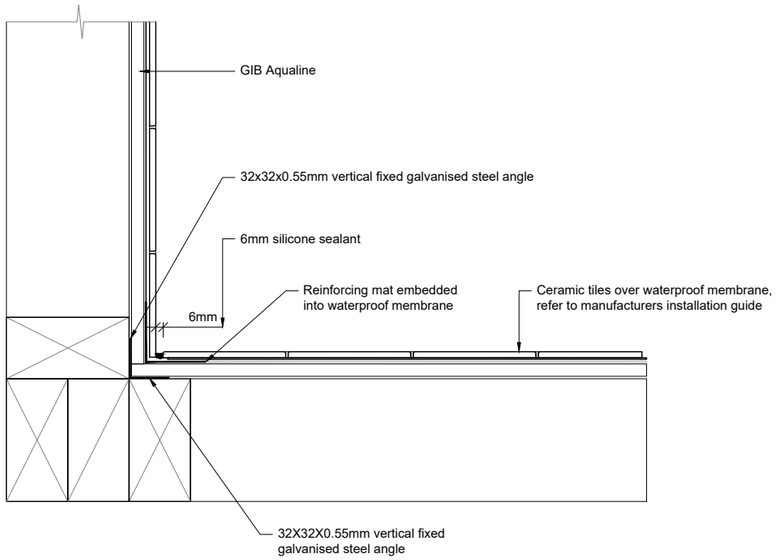
Drawn 6 June 2024

Project No 4148

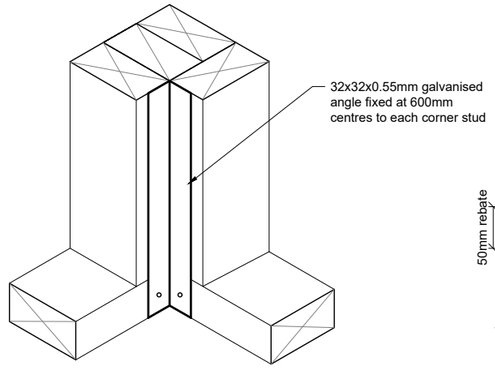
Rev H

Sheet A13

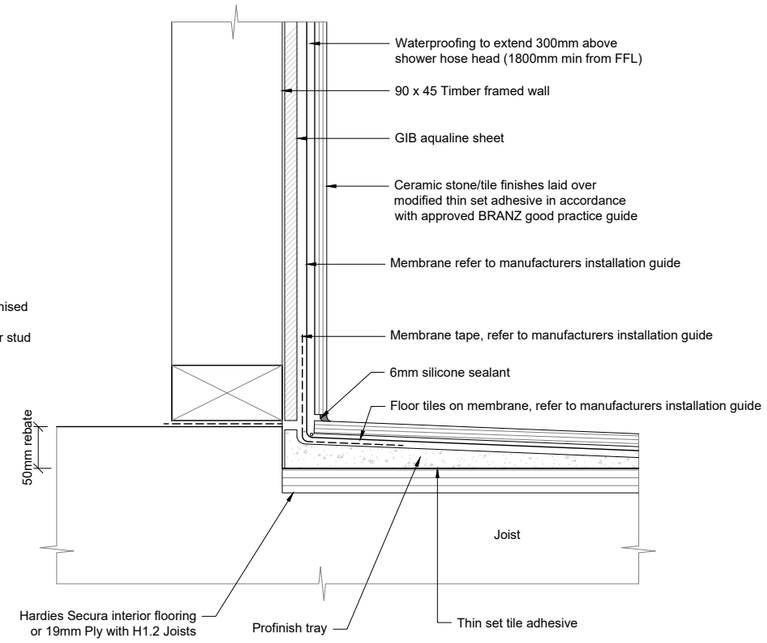
Scale (A3 Original) 1: 5
0.05 0.03 0 0.05 0.1 m



D90 Shower Wall Detail (Plan View)
SCALE = 1:5 @ A3



D91 Wet Area Tiled Walls and Base
SCALE = NTS

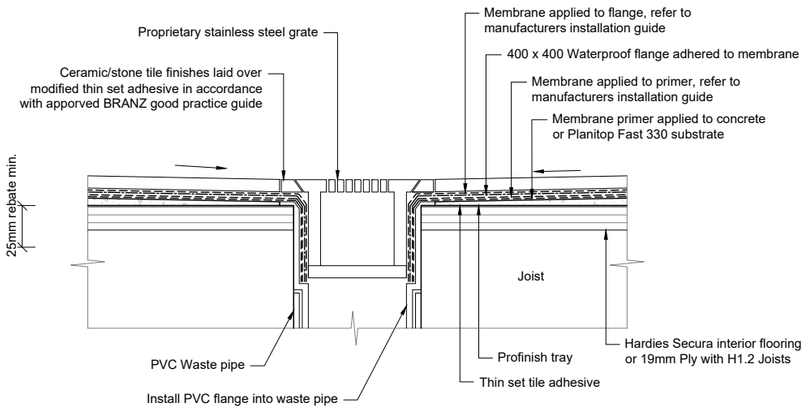


D92 Tiled Shower Tray Detail
SCALE = 1:5 @ A3

NOTE:

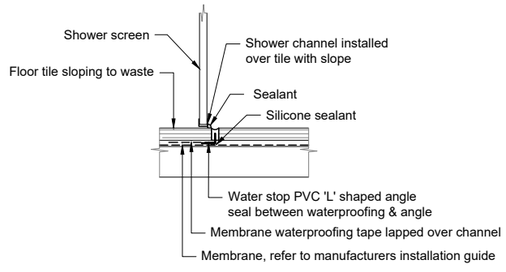
1. All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
2. All construction materials fixings & fastenings to comply with NZS 3604:2011 Section 4 & NZBC B2.
3. Plumbing to be installed by resigtered Plumber.
4. Refer to Gib aqualine Wet Area Systems for manufacturers installation required for GIB lining to typical fixtures & installations.
5. Tiled showers to have membrane applied under tiling.
6. All wet areas to be provided with impervious linings as per NZBC E3/AS1.
7. Builder to refer to fixture manufacturers requirements for framing /nogging required for installations of all fixtures & fixings.
8. "Watersplash" Areas to E3/ AS1

- Seal around all penetrations and at junctions of wall/floor tiles with approved mould resistant silicone sealant.
- Watersplash areas & surfaces adjacent to sanitary & laundering facilities to be impervious to compl.y with NZBC E3.
- Kitchen bench/ work surfaces 3.0 to comply with G3/ AS1.
- Membrane used behind all sealant joints.

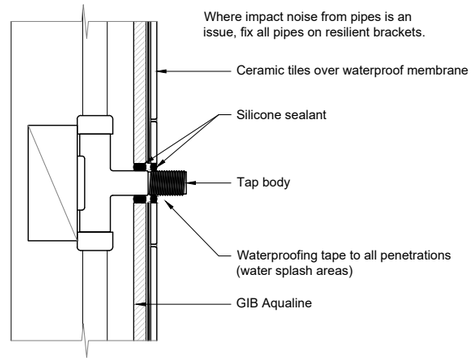


NOTE:
Maintain 100mm slab thickness

D93 Internal Wet Area Waste Detail
SCALE = 1:5 @ A3



D94 Section Channel Detail
SCALE = 1:5 @ A3



D95 Tile Penetration Detail
SCALE = 1:5 @ A3

Tiles to be installed in accordance with BRANZ Good Practice Guide

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Project Title
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Lot 1 DP 168917

Sheet Title
Membrane Details

Drawn 6 June 2024

Project No 4148

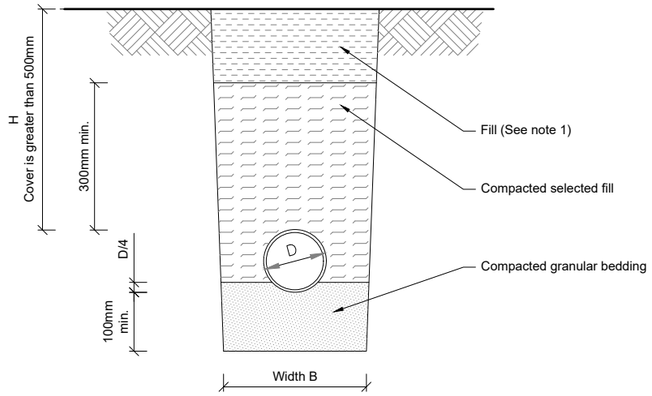
Rev H

Sheet A14

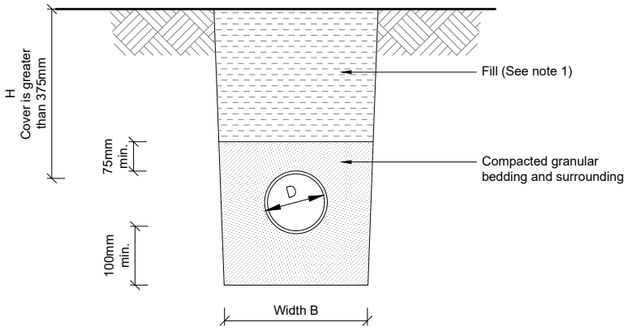
Scale (A3 Original) 1: 5

0.05 0.03 0 0.05 0.1 m

Figure 7: **Bedding and backfilling**
Paragraphs 5.2.1, 5.3.1 and 5.4.1



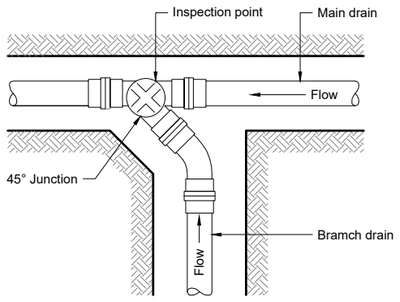
(a) Bedding type 'B' of NZS 7643
Cover greater than 500mm



(b) Bedding type 'D' of NZS 7643
Cover greater than 375mm

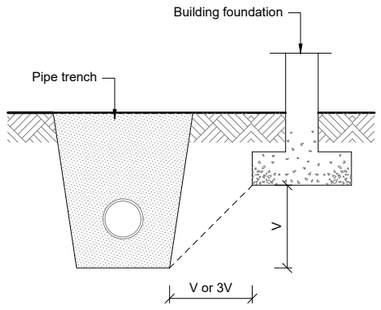
NOTE:
Fill shall be:
Ordinary fill where drains are located below gardens and open country.
Compacted selected fill where the drains are located below residential driveways and similar areas subject to light traffic.

Figure 9: **Inspection points**
Paragraph 5.7.3

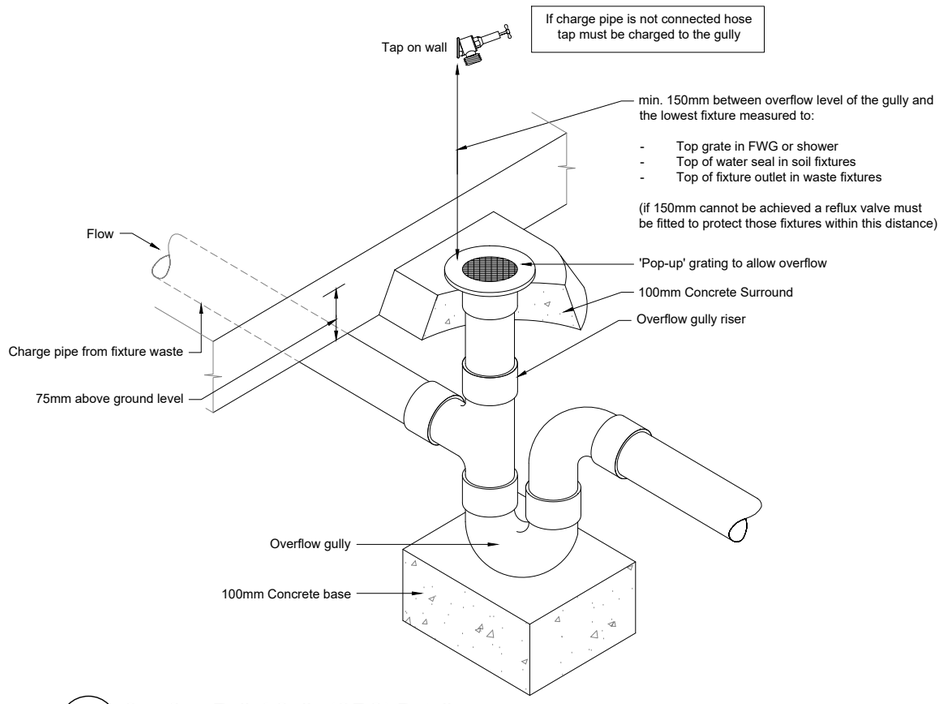


101 - Trench & Inspection Joint Details
SCALE = NTS

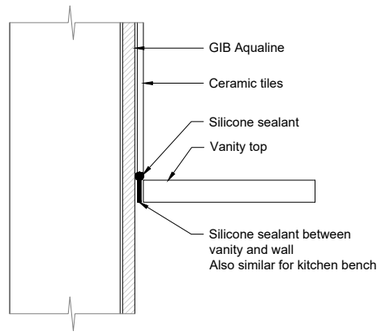
Figure 8: **Relationship of pipe trench to building foundation**
Paragraph 5.6.1



Minimum horizontal separation shall be
V or 3V depending on length of time
trench open, see paragraph 5.6.1



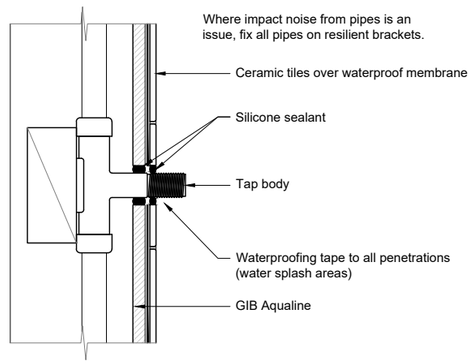
102 - Overflow Relief Gully (ORG) Detail
SCALE = NTS



D97 - Tile Upstand Detail
SCALE = 1:5 @ A3

Note:

Where impact noise from pipes is an issue, fix all pipes on resilient brackets.



D98 - Tile Penetration Detail
SCALE = 1:5 @ A3

NOTE:

1. All work to be done in accordance with NZS 3604: 2011 and the NZ Building Code unless specifically designed.
2. All construction materials fixings & fastenings to comply with NZS 3604:2011 Section 4 & NZBC B2.
3. Plumbing to be installed by resigtered Plumber.
4. Refer to Gib aqualine Wet Area Systems for manufacturers installation required for GIB lining to typical fixtures & installations.
5. Builder to refer to fixture manufacturers requirements for framing /nogging required for installations of all fixtures & fixings.

"Watersplash" Areas to E3/ AS1

- Seal around all penetrations and at junctions of wall/floor tiles with approved mould resistant silicone sealant.
- Watersplash areas & surfaces adjacent to sanitary & laundering facilities to be impervious to comply with NZBC E3.
- Kitchen bench/ work surfaces 3.0 to comply with G3/ AS1.

6. All drainage is diagrammatical, drainlayer to determine on site drainage layout and provide asbuilt plan when complete.
7. Number of downpipes required as per NZBC E1/AS1 1 x 74mmØ downpipe per 70m² roof plan area.
8. Stormwater: 100mm Ø UPVC pipe, minimum gradient 1:120.
9. All drainage to comply with AS/NZS 3500 & NZBC G13/AS1.

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Project Title
Andrew & Tina Syme
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Sheet Title
Drainage Details

Drawn 6 June 2024

Project No 4148

Rev H

Sheet A15

Scale (A3 Original) 1: 10
0.1 0.05 0 0.1 0.2 m

Wilton Joubert Limited
09 527 0196
PO BOX 11-381
Ellerslie
Auckland 1524

SITE	23 Koropewa Road, Kerikeri
LEGAL DESCRIPTION	Lot 1 DP 168917
PROJECT	Proposed Minor Dwelling & Future Sleepout
CLIENT	Andrew & Tina Syme
REFERENCE NO.	134493
DOCUMENT	Stormwater Mitigation Report
STATUS/REVISION No.	A
DATE OF ISSUE	13th June 2024

Report Prepared For	Email
Andrew & Tina Syme	andrewtinasyme@gmail.com

Authored by	**G.Brant** *(BE(Hons) Civil)*	Civil Engineer	Gustavo@wjl.co.nz	
Reviewed by	**P. McSweeney** *(BE(Hons) Civil)*	Civil Engineer	Patrick@wjl.co.nz	
Approved by	**B. Steenkamp** *(CPEng, BEng Civil, CMEngNZ, BSc (Geology))*	Senior Civil Engineer	BenS@wjl.co.nz	

1. EXECUTIVE SUMMARY

The following table is intended to be a concise summary which must be read in conjunction with the relevant report sections as referenced herein.

Legal Description:	Lot 1 DP 168917
Site Area:	3,905m²
Development Type:	Proposed Minor Dwelling & Future Sleepout
Development Proposals Supplied:	Plan Set supplied by O'Brien Design Consulting (Ref No: 4148 Rev H, dated: 06.06.2024)
District Plan Zone:	Rural Production
Permitted Activity Coverage:	15%
Impermeable Coverage:	Post-Development Impermeable Areas Total Roof Area 436.2m² Total Hardstand 342.8m² Total impermeable area = 779m² or 19.9% of the site area
Activity Status:	Controlled Activity
Roof Attenuation:	Attenuation is to be provided in accordance with the requirements outlined in Section 5 via a detention tank. **Proposed Tank** – 1 x 10,000 litre Promax Rainwater Tank (or similar) **Dimensions** – 2165mmØ (or greater) x 2900mm high (or greater) **WQV Control Orifice** – 15mmØ orifice; located 150mm above the base of the tank **1% AEP Control Orifice** – 41mmØ orifice; located 1200mm above the WQV Control Orifice **Overflow** – 100mmØ at the top of the tank
Driveway Mitigation:	It is recommended that discharge from the detention tank, driveway catchpit(s) and future sleepout be directed via sealed pipes to a 6m long above ground dispersal device to the northeast of the proposed minor dwelling.
Stormwater Routing:	**New Minor Dwelling**: Drain to proposed 10,000L tank **Existing Dwelling**: Redirect >85m² of roof area to proposed 10,000L tank **Future Sleepout**: Drain directly to new dispersal device, bypassing detention tank **Other**: Drain remain as is

2. SCOPE OF WORK

Wilton Joubert Ltd. (WJL) was engaged by the client, **Andrew & Tina Syme**, to produce an on-site stormwater mitigation assessment at the above site.

At the time of report writing, we have been supplied the following documents:

- Plan Set supplied by O'Brien Design Consulting including site plan and elevations (Ref No: 4148 Rev H, dated: 06.06.2024)

Should any changes be made to the provided plans with stormwater management implications, WJL must be contacted for review.

3. SITE DESCRIPTION

The 3,905m² property is legally described as Lot 1 DP 168917 and is located off the eastern side of Koropewa Road. Access to the lot is directly off Koropewa Road via an existing metal driveway which provides access to the existing dwelling on-site.

Topographically speaking, the property falls to a low point within a stream tributary to the Waipekakoura River at the north-eastern third of the site at gentle to moderate slopes. Besides the existing development, ground cover on-site consists predominantly of grass with trees/shrubs scattered around the south-western half of the site and dense vegetation within the stream environment on the north-eastern side of the property.

The Far North District Council (FNDC) GIS Water Services Map indicates that the property is not serviced by public stormwater, wastewater or potable water reticulation.

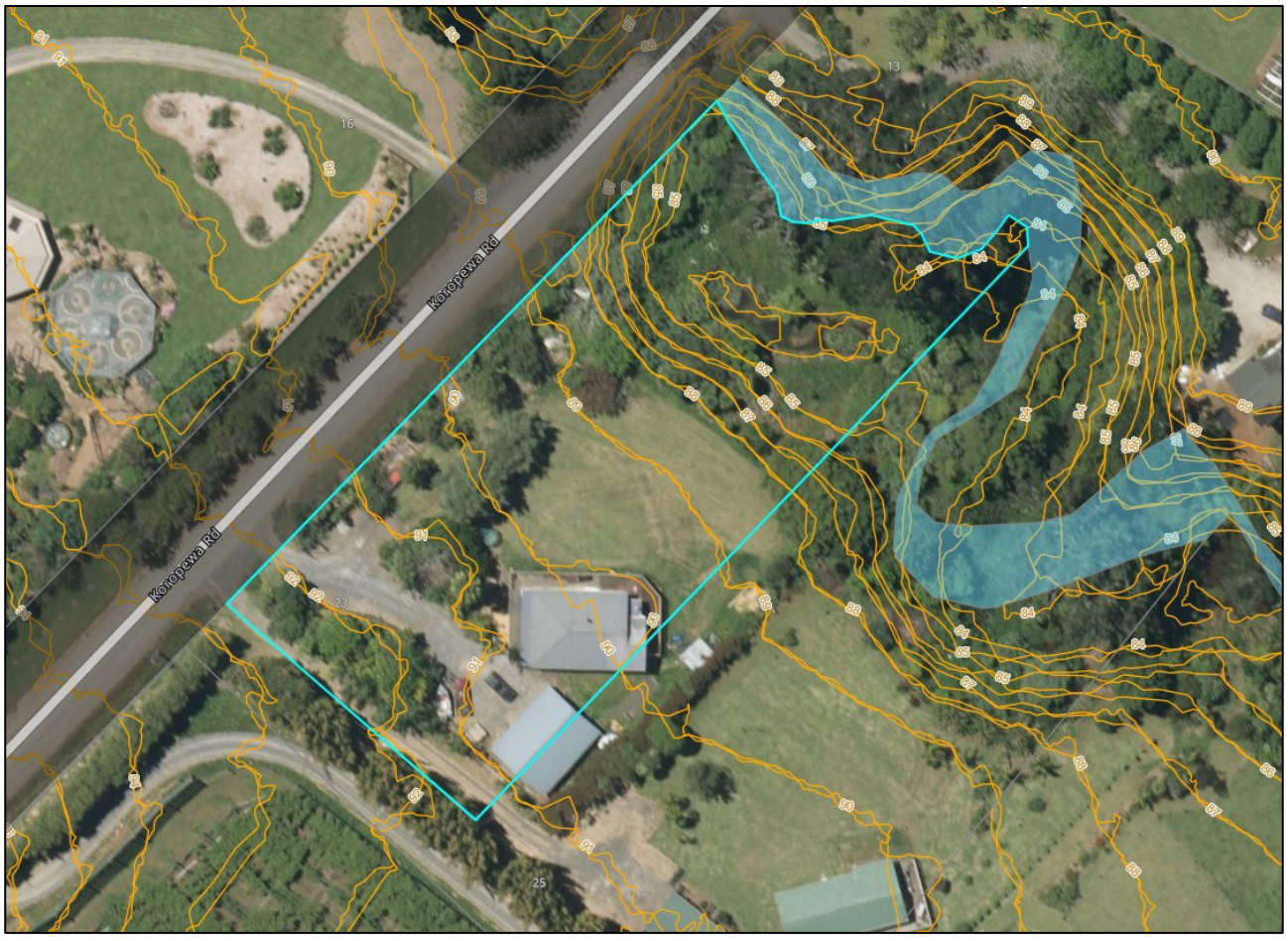


Figure 1: Aerial Snip from FNDC Maps Showing Site Boundaries (cyan) & 1m Contours (yellow)

4. DEVELOPMENT PROPOSALS

The development proposal, obtained from the client, is to construct a minor dwelling and concrete driveway extension on-site as depicted in the plan set provided by O'Brien Design Consulting (Ref No: 4148 Rev H, dated: 06.06.2024).

A future sleepout is also depicted in the plans – this is also included in the stormwater mitigation assessment herein.

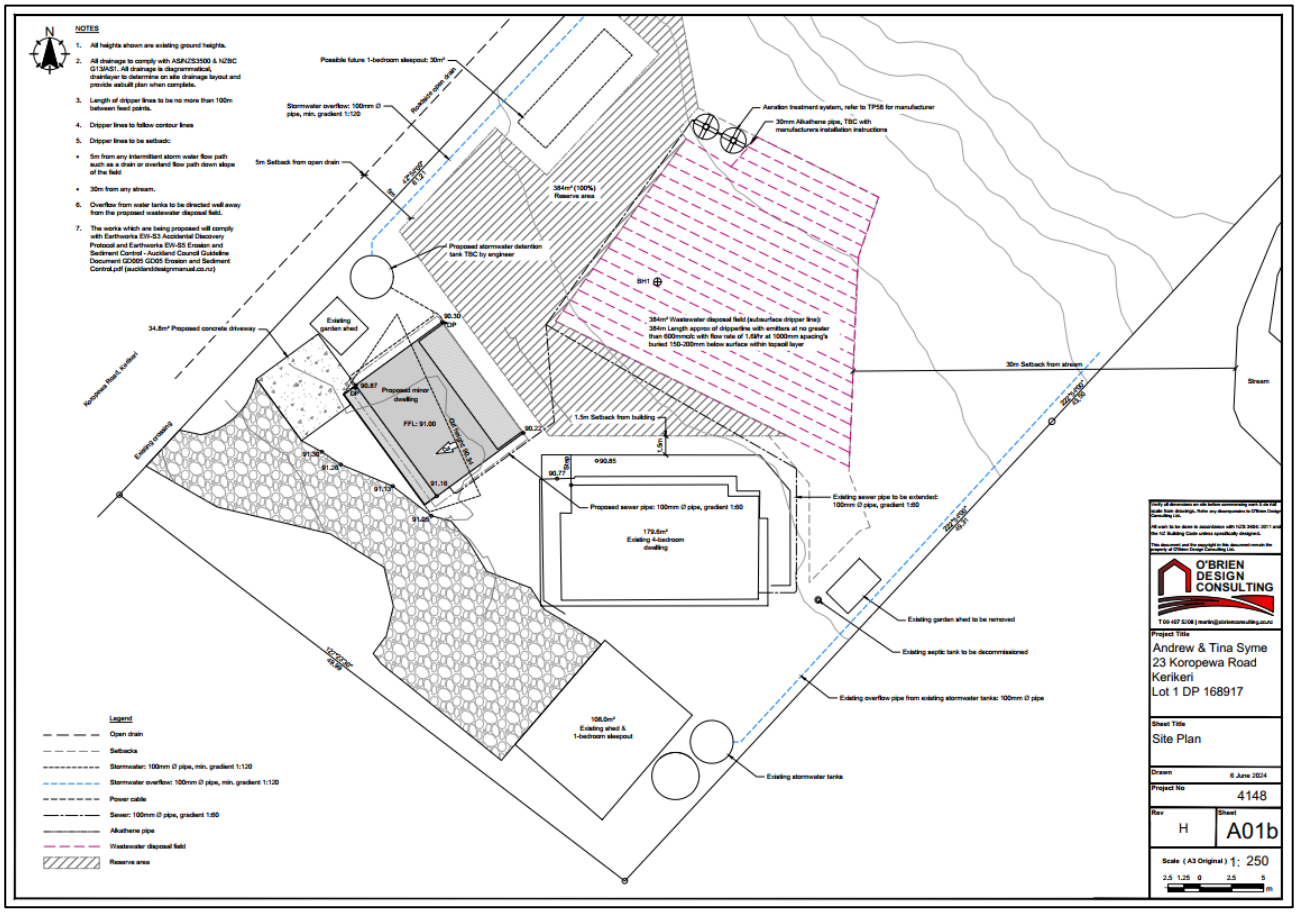


Figure 2: Snip of Proposed Site Plan Provided by O'Brien Design Consulting (Ref No: 4148 Rev H, dated: 06.06.2024)

The principal objective of this assessment is to provide an indicative stormwater disposal design which will manage runoff generated from the proposed impermeable areas resulting from the proposed development.

5. ASSESSMENT CRITERIA

Impermeable Areas

The calculations for the stormwater system for the development are based on a gross site area of 3,905m² and the below areas *extracted from the supplied plans*:

	Pre-Development	Post-Development	Total Change
Total Roof Area	**298 m²**	**436.2 m²**	138.2 m²
Existing Dwelling	179.6 m²	179.6 m²	
Existing Garage	108 m²	108 m²	
Existing Shed	10.4 m²	10.4 m²	
Proposed Minor Dwelling	0 m²	108.2 m²	
Future Sleepout	0 m²	30 m²	
Total Hardstand	**308 m²**	**342.8 m²**	34.8 m²
Existing Metal Driveway	308 m²	308 m²	
Proposed Concrete Driveway	0 m²	34.8 m²	
Pervious	3,299 m²	3,126 m²	-173 m²

The total amount of impermeable area on site, post-development, equates to 779m² or 19.9% of the site area. Should any changes be made to the current proposal, the on-site stormwater mitigation design must be reviewed.

District Plan Rules

The site is zoned Rural Production. The following rules apply under the FNDC District Plan:

8.6.5.1.3 – **Permitted Activities – Stormwater Management** - The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%

8.6.5.2.1 – **Controlled Activities – Stormwater Management** - The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 20%.

The total proposed impermeable area, including the future sleepout, exceeds 15% of the site area and does not comply with Permitted Activity Rule (8.6.5.1.3). Therefore, the proposal is considered to be a Controlled Activity. Additional considerations for stormwater management as outlined in the FNDC District Plan Section 8.6.5.2.1 are required. A District Plan Assessment has been included in Section 8 of this report.

Design Requirements

The stormwater design has been completed in accordance with the following documents:

- The Far North District Council Engineering Standards 2023
- The operative Far North District Council District Plan

The total impermeable area in exceedance of Permitted Activity Rule 8.6.5.1.3 is **193.25m²**. Stormwater attenuation must therefore be provided for this excess impermeable area.

In accordance with Table 4-1 of the FNDC Engineering Standards, water quality volume (WQV) control will be provided for the 90th percentile of the 24-hour storm event for the proposed impermeable areas in exceedance of the permitted activity threshold.

The Northland Regional Council (NRC) Natural Hazards Map indicates Priority Rivers flooding downstream of the subject property. To mitigate the adverse effects of runoff resulting from the proposed development on downstream flooding, runoff resulting from the proposed impermeable areas exceeding the permitted activity threshold will be attenuated back to the greenfields flow rate for the 1% AEP design storm, including an allowance for climate change factors.

The Type IA storm profile was utilised for the Flood Control attenuation calculations in accordance with TR-55. HydroCAD® software has been utilised in design for a 1% AEP rainfall value of 329mm with a 24-hour duration. Rainfall data was obtained from HIRDS and increased by 20% to account for climate change.

For WQV Control calculations, a pre-development 90th percentile rainfall value of 25mm was adopted in accordance with Table 4-1 of the Far North District Council Engineering Standards. TP108 methodology has been utilised to calculate the WQV Control as discussed above.

Provided that the recommendations within this report are adhered to, the effects of stormwater runoff resulting from the unattenuated proposed / existing impermeable surfaces (585.75m^2 total) are considered to have less than minor effects on the receiving environment, equivalent to conditions that would result from development proposals falling within the Permitted Activity coverage threshold.

6. STORMWATER MITIGATION ASSESSMENT

To meet the requirements outlined in Section 5, the following must be provided:

Potable Water Supply

It is our understanding that 2 x 25,000L rainwater tanks are currently in use to provide the existing dwelling with a potable water supply. We understand that it is proposed to utilise these existing potable water tanks to provide the proposed minor dwelling and future sleepout with a potable water supply.

Stormwater Mitigation - Roof

A detention tank is required to be installed for the mitigation of runoff in accordance with the requirements outlined in Section 5.

A proprietary guttering system is required to collect roof runoff from the proposed minor dwelling and future sleepout. Leaf guards can be installed to minimise blockage of the attenuation tank. Other adequate protection measures may also be installed in the roof gutters and the tank's inlet. Any in-line protection systems must be installed at least 600mm above the tank inlet.

Roof runoff from the proposed minor dwelling and minimum 85m² of roof area from the existing dwelling must be directed to the detention tank. As per the attached calculations, the design elements of the detention volume are as follows:

Proposed Tank	1 x 10,000 litre Promax Rainwater Tank (or similar)
Tank dimensions	2165mmØ (or greater) x 2900mm high (or greater)
Volume Control	15mm diameter orifice; located 150mm above the base of the tank - 1200mm water elevation - 4.24m³ Storage

Outlet Orifice (1% AEP control)	**41mm diameter orifice**; located 1200mm above the Volume Control Orifice - 852mm water elevation - 7.34m³ Cumulative Storage
Overflow Outlet	**100mm diameter**; located at the top of the tank

Discharge from the proposed detention tank and roof runoff from the future sleepout must be transported via sealed pipes to the dispersal device specified below. Refer to the appended Site Plan (134493-C200), Tank Detail (134493-C201) and calculation set for clarification.

Adequate fall (minimum 1% grade) from the tank's outlet to the discharge point is required. This is to be confirmed by a suitably qualified professional. If this is not achievable, WJL must be contacted for review of the design.

Stormwater Mitigation – Proposed Driveway

It is recommended to shape the proposed concrete driveway to direct runoff to a catchpit(s), which is to direct runoff to the proposed dispersal device specified below via sealed pipes. Refer to the appended Site Plan (134493-C200) for clarification.

Stormwater catchpit(s) and drainage piping should be in accordance with E1 Surface Water of the NZBC. The catchpit(s) must have a suitable sump to serve as a pre-treatment device prior to discharging to the discharge point.

Stormwater Mitigation – Dispersal Device

It is recommended that discharge from the detention tank, driveway catchpit(s) and future sleepout be directed via sealed pipes to a 6m long above ground dispersal device to the northeast of the proposed minor dwelling. Refer to the appended Site Plan (134493-C200) and Dispersal Device Detail (134493-C202) for clarification.

The dispersal device must be installed level with the property's topography.

The final dispersal device location is to be reviewed on-site by a geotechnical engineer or otherwise suitably qualified professional and confirmed as suitable.

7. STORMWATER RUNOFF SUMMARY

Refer to the appended HydroCAD Calculation output.

Stormwater Runoff Summary – Excluding Future Sleepout

Pre-Development Scenario – 1% AEP Storm Event + CCF

Surface	*Area*	*Runoff CN*	*1% AEP Peak Flow Rate*
Greenfields Impermeable Roof Areas Exceeding Permitted Activity Threshold (Excluding Future Sleepout)	163.25 m²	74	2.81ℓ/s

Post-Development Scenario – 1% AEP Storm Event + CCF

Surface	*Area*	*Runoff CN*	*1% AEP Peak Flow Rate*
Post-Development Proposed Minor Dwelling Roof Area & Existing Dwelling Roof Area via Proposed Detention Tank	163.25 m²	98	2.80ℓ/s

Stormwater Runoff Summary – Including Future Sleepout

Pre-Development Scenario – 1% AEP Storm Event + CCF

Surface	*Area*	*Runoff CN*	*1% AEP Peak Flow Rate*
Greenfields Impermeable Roof Areas Exceeding Permitted Activity Threshold (Including Future Sleepout)	193.25 m²	74	3.33ℓ/s

Post-Development Scenario – 1% AEP Storm Event + CCF

Surface	*Area*	*Runoff CN*	*1% AEP Peak Flow Rate*
Post-Development Proposed Minor Dwelling Roof Area & Existing Dwelling Roof Area via Proposed Detention Tank	193.25 m²	98	3.20ℓ/s

Given the design parameters, stormwater neutrality has been achieved for the 1% AEP storm events across the existing / proposed / future impermeable surfaces exceeding the permitted activity threshold.

8. DISTRICT PLAN ASSESSMENT

As the proposed development is not compliant with Permitted Activity Rule 8.6.5.1.3 it is therefore regarded as a Controlled Activity.

In assessing an application under this provision, the Council will exercise its discretion to review the following matters below, (a) through (i) of FNDCDP Section 8.6.5.2.1.

In respect of matters (a) through (i), we provide the following comments:

(a) the extent to which building site coverage and impermeable surfaces contribute to total catchment impermeability and the provisions of any catchment or drainage plan for that catchment;	Impermeable surfaces resulting from the development increase site impermeability by 173m². Through tank attenuation, runoff is to be attenuated to pre-development conditions for the proposed impermeable coverage exceeding the Permitted Activity threshold.
(b) the extent to which Low Impact Design principles have been used to reduce site impermeability;	The impermeable areas in exceedance of Permitted Activity Rule 8.6.5.1.3 have been attenuated back to pre-development flow rates for the 1% AEP storm event, adjusted for climate change. WQV control has also been provided for the impermeable areas in excess of the permitted activity threshold.
(c) any cumulative effects on total catchment impermeability;	Impervious coverage will increase by 173m².
(d) the extent to which building site coverage and Impermeable Surfaces will alter the natural contour or drainage patterns of the site or disturb the ground and alter its ability to absorb water;	Runoff from the existing / proposed impermeable roof areas is to be collected and directed to the discharge point via sealed pipes. Ponding is not anticipated to occur provided the recommendations within this report are adhered to, mitigating interference with natural water absorption.
(e) the physical qualities of the soil type;	Kerikeri Volcanic Group – moderate drainage
(f) the availability of land for the disposal of effluent and stormwater on the site without adverse effects on the water quantity and water quality of water bodies (including groundwater and aquifers) or on adjacent sites;	Runoff resulting from the existing / proposed roof areas is to be collected and directed to the discharge point via sealed pipes, mitigating the potential for runoff to pass over / saturate surrounding soils. The site is large enough for on-site stormwater and effluent disposal (i.e. setbacks between water sources and effluent disposal comply with Table 9 of the PRPN).
(g) the extent to which paved, Impermeable Surfaces are necessary for the proposed activity;	The existing and proposed driveway areas are necessary to provide access to the existing and proposed structures and is not considered excessive.
(h) the extent to which land scaping and vegetation may reduce adverse effects of run-off;	Existing vegetation and any plantings introduced by the homeowner during occupancy will aid in reducing surface water velocity and providing treatment. No specific landscaping scheme is proposed as part of the stormwater management system described herein.
(i) the means and effectiveness of mitigating stormwater runoff to that expected by permitted activity threshold.	The impermeable areas in exceedance of Permitted Activity Rule 8.6.5.1.3 have been attenuated back to pre-development flow rates for the 1% AEP storm event, adjusted for climate change. WQV control has also been provided for the impermeable areas in excess of the permitted activity threshold.

9. NOTES

If any of the design specifications mentioned in the previous sections are altered or found to be different than what is described in this report, Wilton Joubert Ltd will be required to review this report. Indicative system details have been provided in the appendices of this report (134493-C200, 134493-C201 & 134493-C202).

Care should be taken when constructing the discharge point to avoid any siphon or backflow effect within the stormwater system.

Subsequent to construction, a programme of regular inspection / maintenance of the system should be initiated by the Owner to ensure the continuance of effective function, and if necessary, the instigation of any maintenance required.

Wilton Joubert Ltd recommends that all contractors keep a photographic record of their work.

10. LIMITATIONS

The recommendations and opinions contained in this report are based on information received and available from the client at the time of report writing.

This assignment only considers the primary stormwater system. The secondary stormwater system, Overland Flow Paths (OLFP), vehicular access and the consideration of road/street water flooding is all assumed to be undertaken by a third party.

All drainage design is up to the connection point for each building face of any new structures/slabs; no internal building plumbing or layouts have been undertaken.

During construction, an engineer competent to judge whether the conditions are compatible with the assumptions made in this report should examine the site. In all circumstances, if variations occur which differ from that described or that are assumed to exist, then the matter should be referred to a suitably qualified and experienced engineer.

The performance behaviour outlined by this report is dependent on the construction activity and actions of the builder/contractor. Inappropriate actions during the construction phase may cause behaviour outside the limits given in this report.

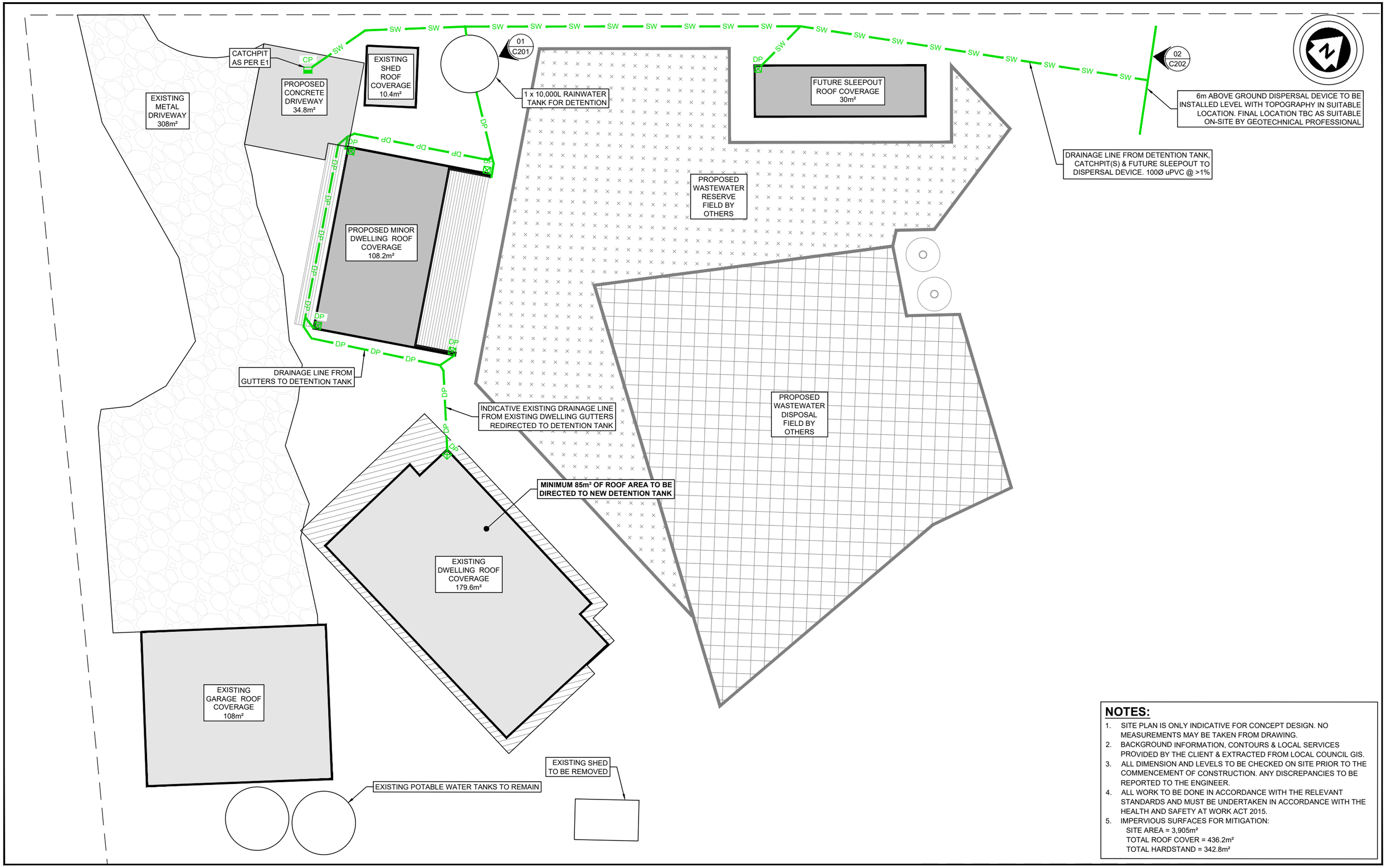
This report has been prepared for the particular project described to us and no responsibility is accepted for the use of any part of this report in any other context or for any other purpose.

Wilton Joubert Ltd.

Gustavo Brant
Civil Engineer
BE(Hons)

REPORT ATTACHMENTS

- Site Plan - C200 (1 sheet)
- Tank Detail – C201 (1 sheet)
- Dispersal Device Detail – C202 (1 sheet)
- Calculation Set



NOTES:

1. SITE PLAN IS ONLY INDICATIVE FOR CONCEPT DESIGN. NO MEASUREMENTS MAY BE TAKEN FROM DRAWING.
2. BACKGROUND INFORMATION, CONTOURS & LOCAL SERVICES PROVIDED BY THE CLIENT & EXTRACTED FROM LOCAL COUNCIL GIS.
3. ALL DIMENSION AND LEVELS TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE RELEVANT STANDARDS AND MUST BE UNDERTAKEN IN ACCORDANCE WITH THE HEALTH AND SAFETY AT WORK ACT 2015.
5. IMPERVIOUS SURFACES FOR MITIGATION:
   SITE AREA = 3,905m²
   TOTAL ROOF COVER = 436.2m²
   TOTAL HARDSTAND = 342.8m²

WILTON JOUBERT
Consulting Engineers
Northland: 09 945 4188
Auckland: 09 527 0196
Christchurch: 021 824 063
Wanaka: 03 443 6209
www.wiltonjoubert.co.nz

ISSUE / REVISION			
No.	DATE	BY	DESCRIPTION
A	JUN '24	GMB	STORMWATER MITIGATION REPORT

DESIGNED BY: GMB
DRAWN BY: GMB
CHECKED BY: BGS
SURVEYED BY: N/A

SERVICES NOTE
WHERE EXISTING SERVICES ARE SHOWN, THEY ARE INDICATIVE ONLY AND MAY NOT INCLUDE ALL SITE SERVICES. WILTON JOUBERT LTD DOES NOT WARRANT THAT ALL, OR INDEED ANY SERVICES ARE SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING SERVICES PRIOR TO AND FOR THE DURATION OF THE CONTRACT WORKS.

BUILDING CONSENT
DESIGN / DRAWING SUBJECT TO ENGINEER'S APPROVAL

DRAWING TITLE: **SITE PLAN**

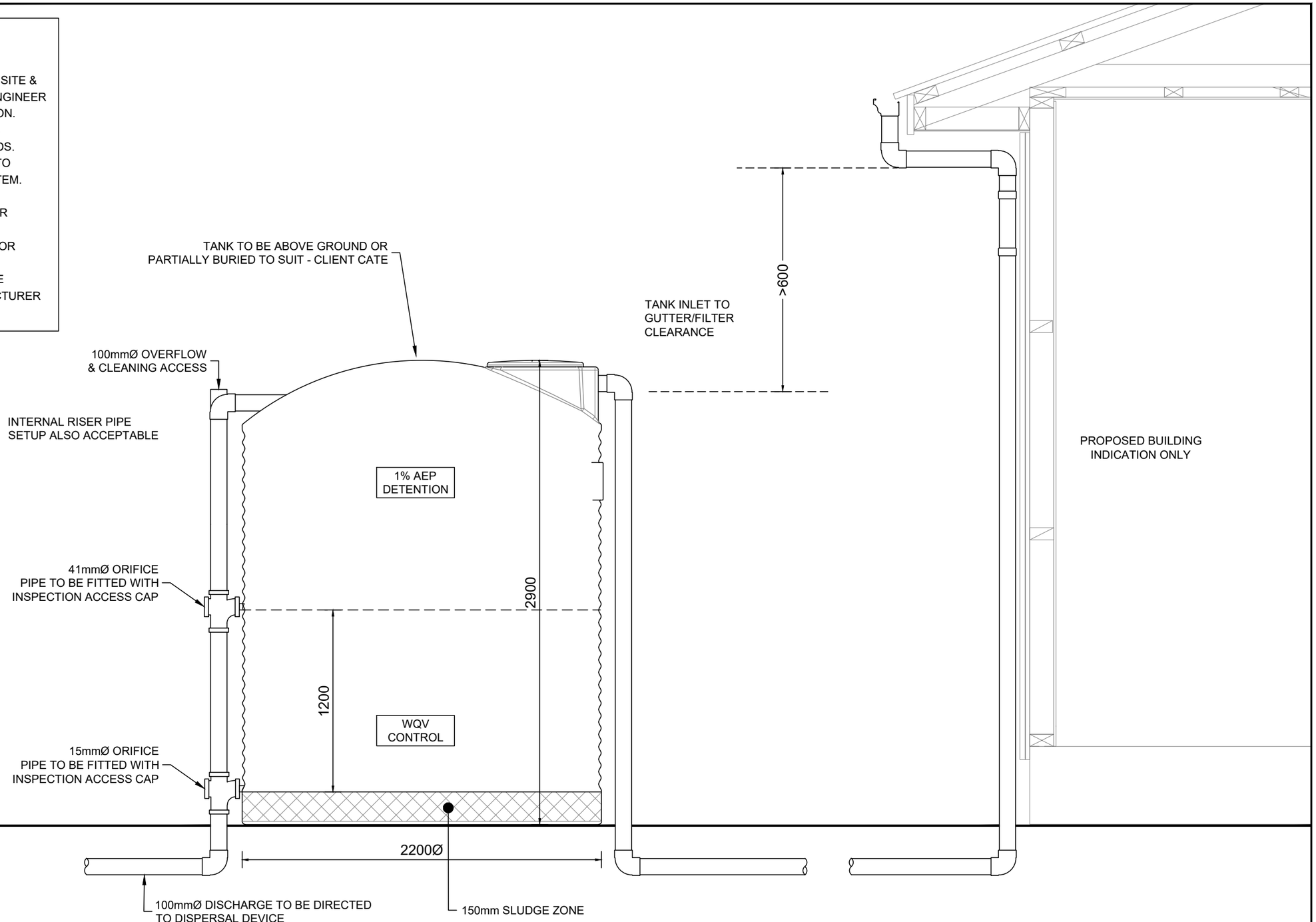
PROJECT DESCRIPTION: **STORMWATER MITIGATION REPORT**

PROJECT TITLE: **LOT 1 DP 168917 23 KOROPEWA ROAD KERIKERI NORTHLAND**

ORIGINAL DRAWING SIZE: A3
OFFICE: **OREWA**
DRAWING SCALE: **1:200**
CO-ORDINATE SYSTEM: NOT COORDINATED
DRAWING NUMBER: **134493-C200**
ISSUE: **A**

NOTES:

1. NOT TO SCALE. DRAWN INDICATIVELY ONLY.
2. ALL LEVELS & DIMENSIONS TO BE CONFIRMED ON SITE & ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. TANK TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS & RELEVANT COUNCIL STANDARDS.
4. REGULAR INSPECTION & CLEANING IS REQUIRED TO ENSURE THE EFFECTIVE OPERATION OF THE SYSTEM.
5. MINIMUM SLUDGE ZONE OF 150mm TO BE KEPT.
6. ASSUMED USE OF A 10,000 LITRE PROMAX TANK OR SIMILARLY APPROVED.
7. ORIFICE TO BE COVERED WITH STAINLESS STEEL OR NYLON MESH.
8. ALL OUTLETS / PENETRATIONS AT THE TANK TO BE INSTALLED BY MANUFACTURER UNLESS MANUFACTURER AGREES FOR DRAINLAYER TO INSTALL.



01 / C200 **TANK DETAIL**
N.T.S

WILTON JOUBERT
Consulting Engineers
Northland: 09 945 4188 Auckland: 09 527 0196
Christchurch: 021 824 063 Wanaka: 03 443 6209
www.wiltonjoubert.co.nz

ISSUE / REVISION			
No.	DATE	BY	DESCRIPTION
A	JUN '24	GMB	STORMWATER MITIGATION REPORT

DESIGNED BY: GMB
DRAWN BY: GMB
CHECKED BY: BGS
SURVEYED BY: N/A

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BUILDING CONSENT
DESIGN / DRAWING SUBJECT TO ENGINEER'S APPROVAL

DRAWING TITLE: **TANK DETAIL**

PROJECT DESCRIPTION: **STORMWATER MITIGATION REPORT**

PROJECT TITLE: **LOT 1 DP 168917 23 KOROPEWA ROAD KERIKERI NORTHLAND**

ORIGINAL DRAWING SIZE:	OFFICE:
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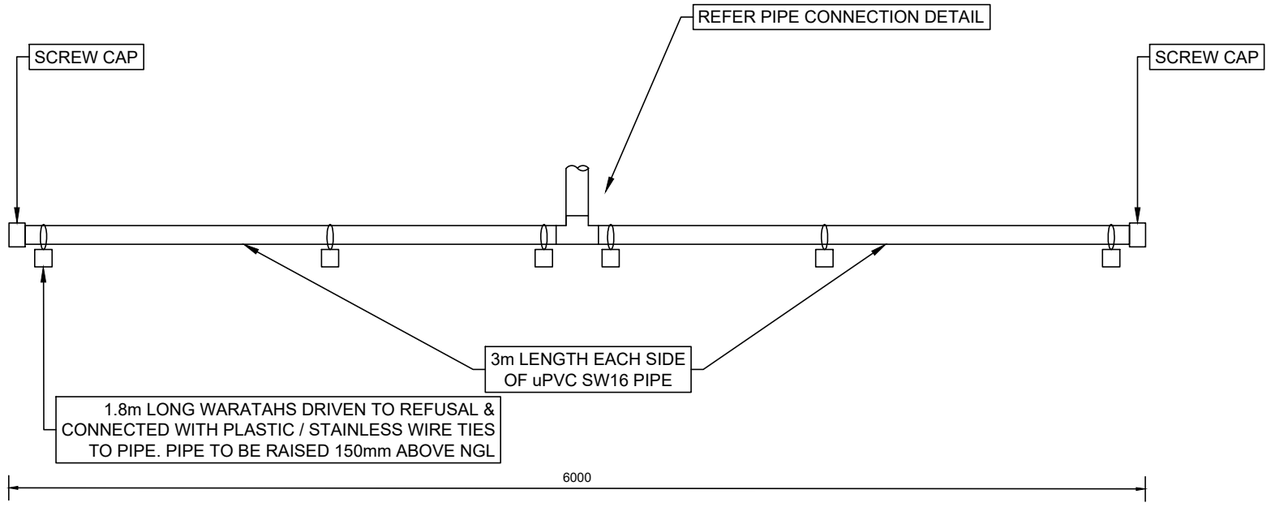
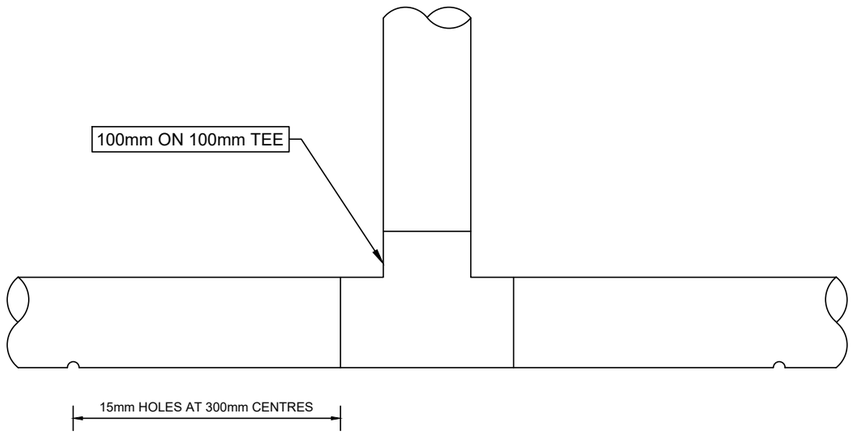
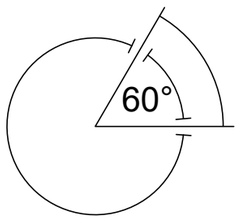
DRAWING SCALE:	CO-ORDINATE SYSTEM:
N.T.S	NOT COORDINATED
DRAWING NUMBER:	ISSUE:
134493-C201	A

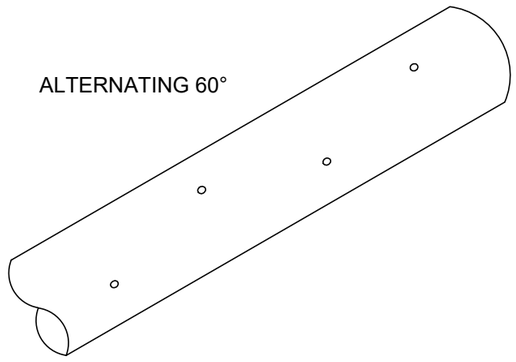


PLAN



PIPE CONNECTION DETAIL





PIPE OUTLET HOLE
ARRANGEMENT DETAIL

02 / C200 **DISPERSAL DEVICE DETAIL**

N.T.S

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ISSUE / REVISION			
No.	DATE	BY	DESCRIPTION
A	JUN '24	GMB	STORMWATER MITIGATION REPORT

DESIGNED BY: GMB
DRAWN BY: GMB
CHECKED BY: BGS
SURVEYED BY: N/A

SERVICES NOTE
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BUILDING CONSENT
DESIGN / DRAWING SUBJECT TO ENGINEER'S APPROVAL

DRAWING TITLE: **DISPERSAL DEVICE DETAIL**

PROJECT DESCRIPTION: **STORMWATER MITIGATION REPORT**

PROJECT TITLE: **LOT 1 DP 168917
23 KOROPEWA ROAD
KERIKERI
NORTHLAND**

ORIGINAL DRAWING SIZE:	OFFICE:
A3	OREWA
DRAWING SCALE:	CO-ORDINATE SYSTEM:
N.T.S	NOT COORDINATED
DRAWING NUMBER:	ISSUE:
134493-C202	A

WILTON JOUBERT
Consulting Engineers

Volume Control Calculations

Job Number	134493	Date:	13.06.2024
Address	23 Koropewa Road	Initials:	GMB
	Kerikeri	Revision	A

Catchment Information For Pre-Development Conditions

193.25	m²	0.00019325 km²	
Group C	soil type		see TP108 page 8 section 3.2 for soil designations
25.00	P_{24}		90th Percentile Rainfall - Table 4-1 FNDC EES

		CN		
193.25	m²	74	Pervious	
0	m²	98	Sealed roof(s)	
0	m²	98	Sealed conrete	
0	m²	0		
193.25	m² tot	74.00	CN -mean	TP108 Eq3.4

5.00	Ia (mm)	Weighted initial abstraction - Ia (mm)
0.03	Tc (hrs)	TP108 Eq 4.3 - pg 12
0.02	Tp (hrs)	Time to peak
89.24	S (mm)	Soil Storage parameter see TP108 eq 3.2 pg 6

3.662	Q_{24} (mm)	Run-Off Depth

0.71	m^3	Volume

Catchment Information For Post-Development Conditions

193.25	m²	0.00019325 km²	
Group C	soil type		see page 8 section 3.2 for soil designations
30.00	P_{24}		90th Percentile + 20% CCF - Table 4-1 FNDC EES

		CN		
0	m²	74	Pervious	
193.25	m²	98	Sealed roof(s)	
0	m²	98	Sealed conrete	
0	m²	89	Metal/Gravel	
193.25	m² tot	98.00	CN -mean	TP108 Eq3.4

0.00	Ia (mm)	Weighted initial abstraction - Ia (mm)
0.02	Tc (hrs)	TP108 Eq 4.3 - pg 12
0.01	Tp (hrs)	Time to peak
5.18	S (mm)	Soil Storage parameter see TP108 eq 3.2 pg 6

25.580	Q_{24} (mm)	Run-Off Depth

4.94	m^3	Volume

Total Detention Volume Required: **4.24** m^3

WILTON JOUBERT
Consulting Engineers

ADDRESS	Lot 1 DP 168917, 23 Koropewa Road, Kerikeri
REFERENCE	Volume Control

JOB NO	134493
DATE	13.06.2024
DESIGNER	GMB
CHECKER	BGS

Outlet Orifice: 24-hour release

Q=(C)(A)(2gh)^0.5	Q = orifice discharge capacity (m3/s)
	C = orifice constant (0.9), value considered conservative
	A = orifice area (m2)
	g = acceleration due to gravity9.8m/s2
	h = head on orifice (m)

Select orifice size (D)	**0.002000**			
Orifice Area (A)	**0.000003**			
Select hydraulic height	**1.200000**			
Flow from tank	**0.014**	*l/s*	**0.05**	m^3/h

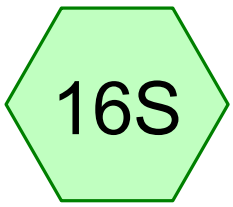
Flow Required

Tank Size	**2.43**	m^3		
24-hr release	**0.028**	*l/s*	**0.10**	m^3/h

Orifice Check

Orifice sized correctly Check if the flows are met

Pre-Development Scenario - Excluding Future Sleepout



Pre-Development Impermeable Area Exceeding 15%

Pre-Development

Subcat Reach Pond Link

Routing Diagram for 134493
Prepared by Wilton Joubert Limited, Printed 13/06/2024

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 16S: Pre-Development Runoff Area=163.2 m² 0.00% Impervious Runoff Depth>241 mm
Tc=10.0 min CN=74 Runoff=2.81 L/s 39.3 m³

Link 17L: Pre-Development Inflow=2.81 L/s 39.3 m³
Primary=2.81 L/s 39.3 m³

Summary for Subcatchment 16S: Pre-Development Impermeable Area Exceeding 15%

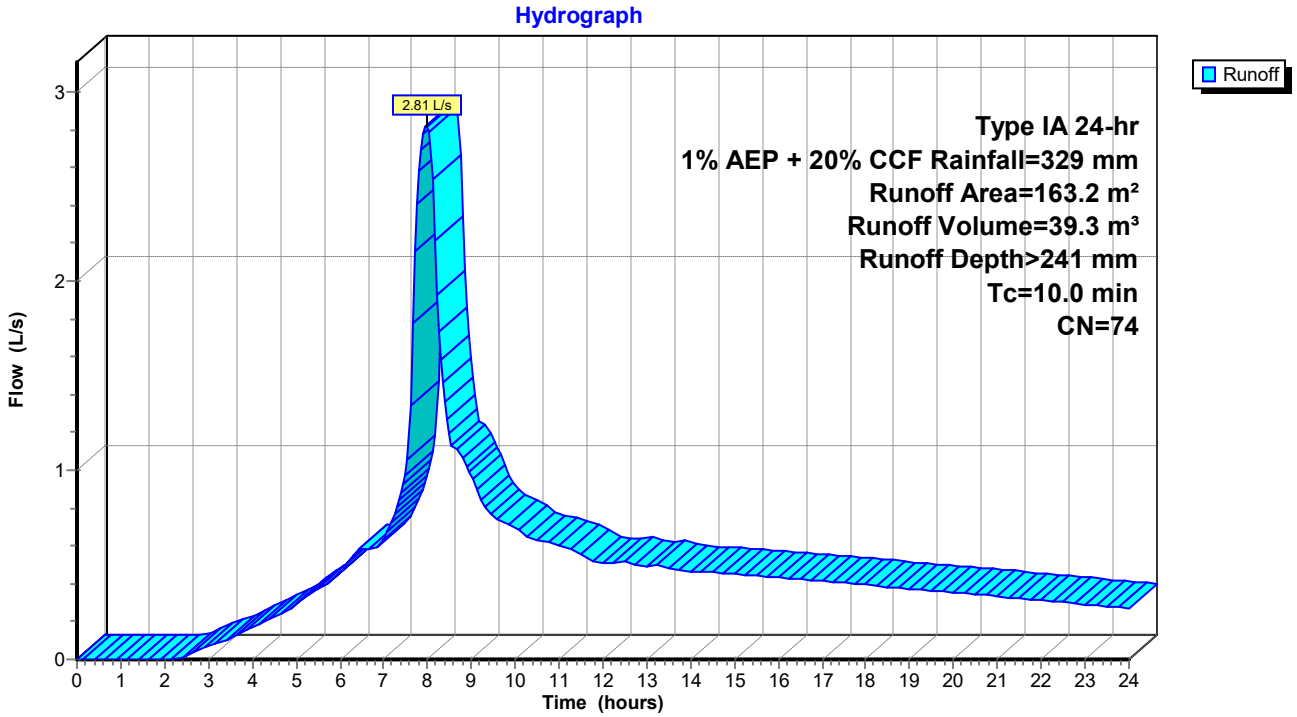
Runoff = 2.81 L/s @ 7.98 hrs, Volume= 39.3 m³, Depth> 241 mm

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=329 mm

Area (m²)	CN	Description
163.2	74	>75% Grass cover, Good, HSG C
163.2		100.00% Pervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 16S: Pre-Development Impermeable Area Exceeding 15%

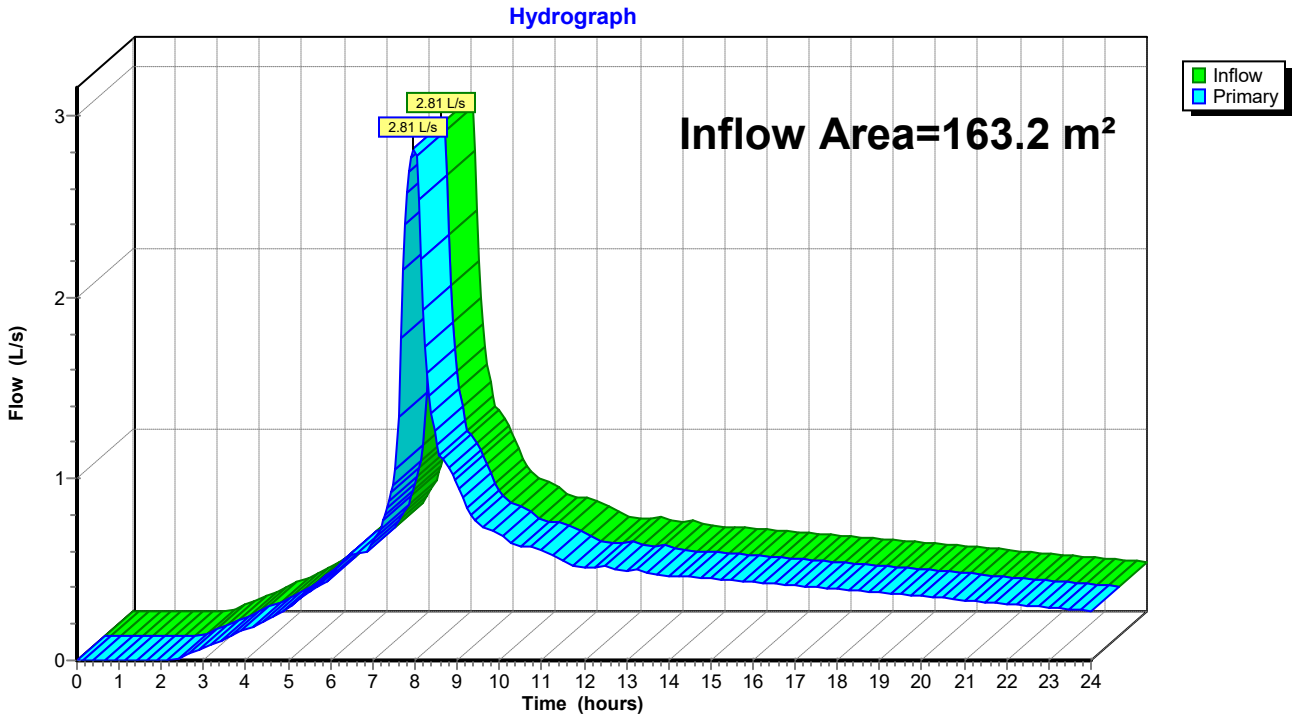


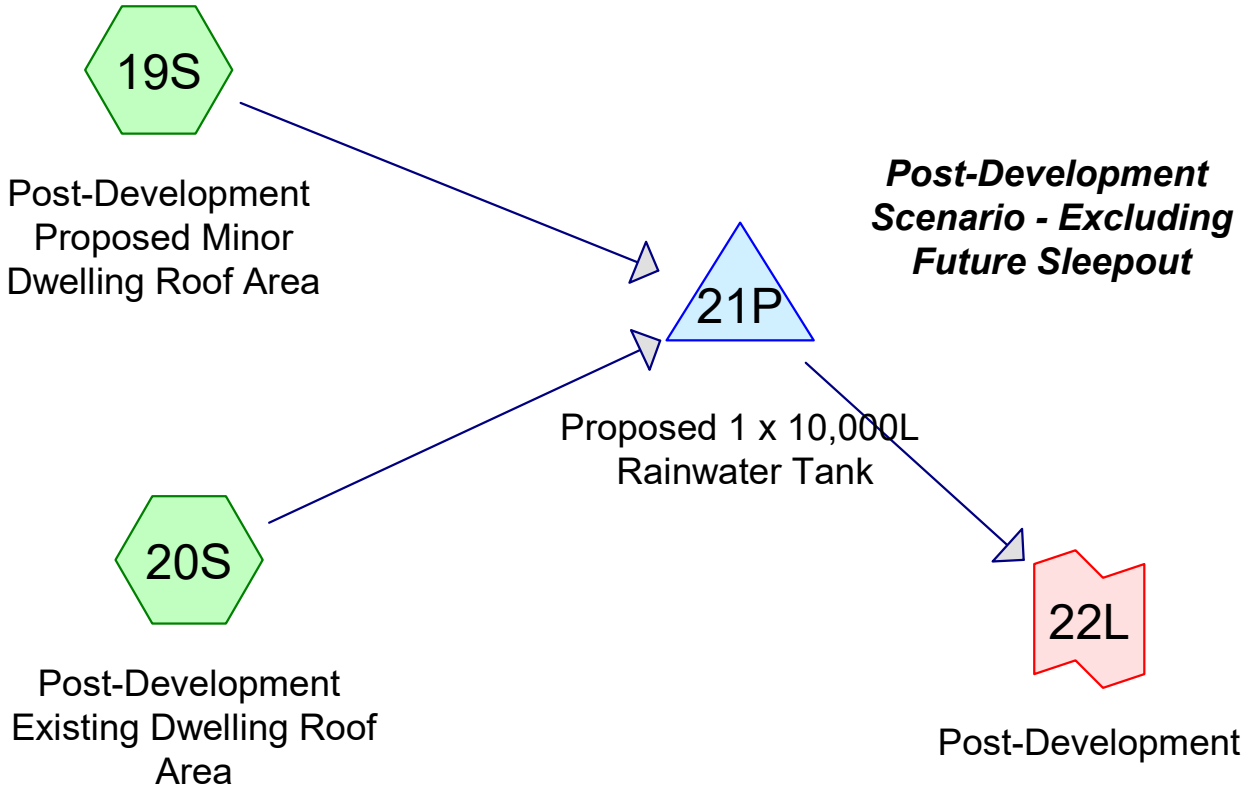
Summary for Link 17L: Pre-Development

Inflow Area = 163.2 m², 0.00% Impervious, Inflow Depth > 241 mm for 1% AEP + 20% CCF event
Inflow = 2.81 L/s @ 7.98 hrs, Volume= 39.3 m³
Primary = 2.81 L/s @ 7.98 hrs, Volume= 39.3 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 17L: Pre-Development





Subcat Reach Pond Link

Routing Diagram for 134493
Prepared by Wilton Joubert Limited, Printed 13/06/2024

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 19S: Post-Development Runoff Area=108.2 m² 100.00% Impervious Runoff Depth>322 mm
Tc=10.0 min CN=98 Runoff=2.35 L/s 34.8 m³

Subcatchment 20S: Post-Development Runoff Area=55.0 m² 100.00% Impervious Runoff Depth>322 mm
Tc=10.0 min CN=98 Runoff=1.19 L/s 17.7 m³

Pond 21P: Proposed 1 x 10,000L Rainwater Peak Elev=0.657 m Storage=2.4 m³ Inflow=3.54 L/s 52.6 m³
Outflow=2.80 L/s 52.5 m³

Link 22L: Post-Development Inflow=2.80 L/s 52.5 m³
Primary=2.80 L/s 52.5 m³

Summary for Subcatchment 19S: Post-Development Proposed Minor Dwelling Roof Area

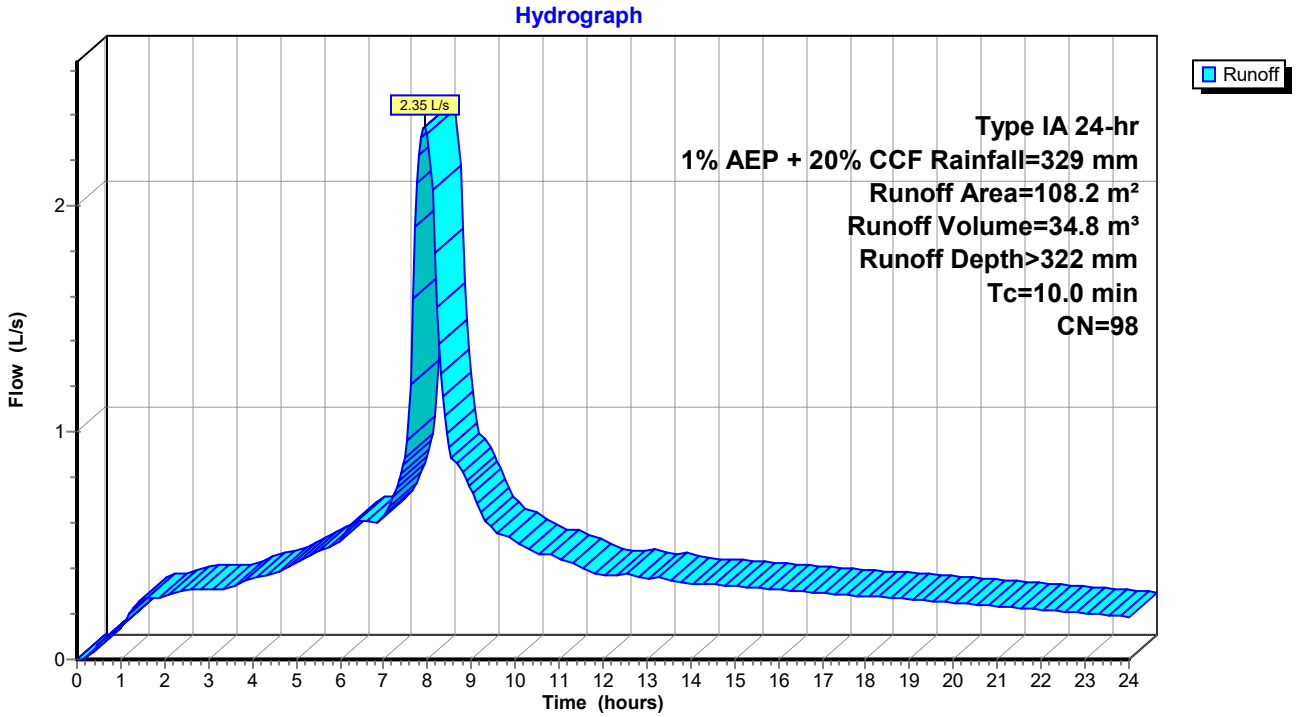
Runoff = 2.35 L/s @ 7.94 hrs, Volume= 34.8 m³, Depth> 322 mm

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=329 mm

Area (m²)	CN	Description
108.2	98	Roofs, HSG C
108.2		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 19S: Post-Development Proposed Minor Dwelling Roof Area



Summary for Subcatchment 20S: Post-Development Existing Dwelling Roof Area

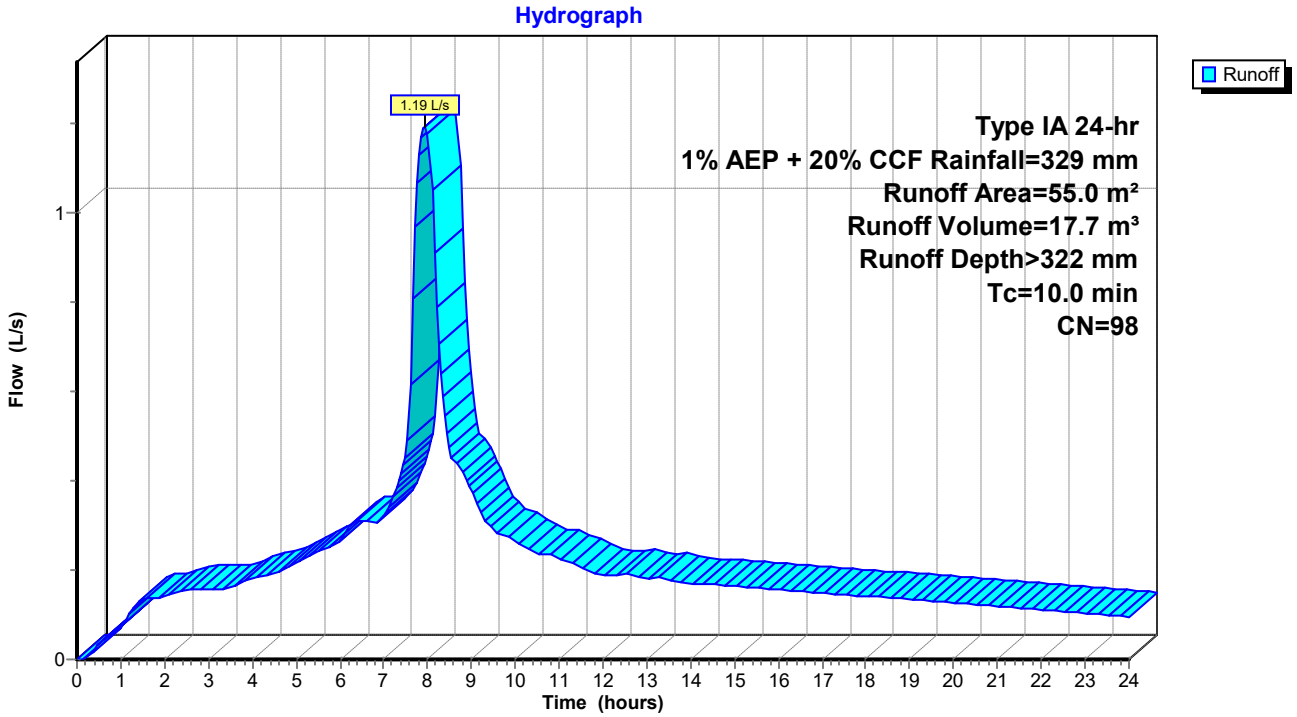
Runoff = 1.19 L/s @ 7.94 hrs, Volume= 17.7 m³, Depth> 322 mm

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=329 mm

Area (m²)	CN	Description
55.0	98	Roofs, HSG C
55.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 20S: Post-Development Existing Dwelling Roof Area



Summary for Pond 21P: Proposed 1 x 10,000L Rainwater Tank

Inflow Area = 163.2 m²,100.00% Impervious, Inflow Depth > 322 mm for 1% AEP + 20% CCF event
Inflow = 3.54 L/s @ 7.94 hrs, Volume= 52.6 m³
Outflow = 2.80 L/s @ 8.14 hrs, Volume= 52.5 m³, Atten= 21%, Lag= 12.1 min
Primary = 2.80 L/s @ 8.14 hrs, Volume= 52.5 m³

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 0.657 m @ 8.14 hrs Surf.Area= 3.7 m² Storage= 2.4 m³

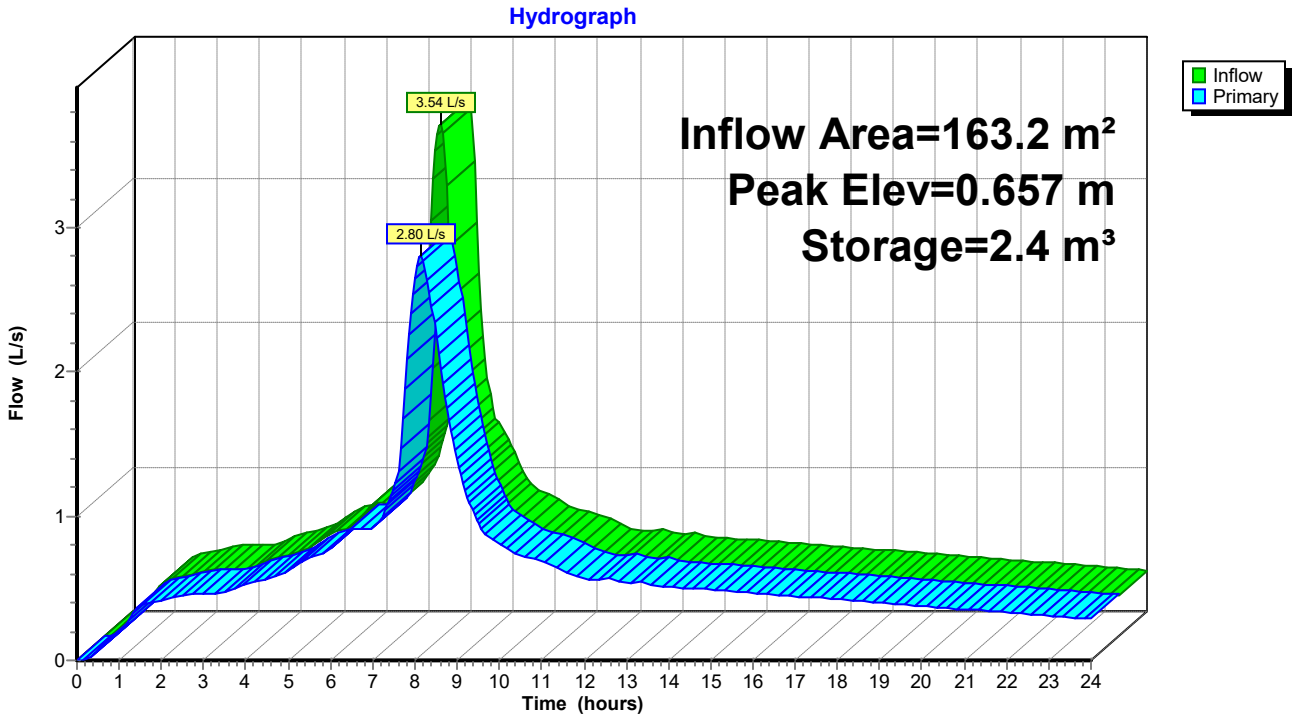
Plug-Flow detention time= 6.8 min calculated for 52.5 m³ (100% of inflow)
Center-of-Mass det. time= 5.4 min (648.7 - 643.3)

Volume	Invert	Avail.Storage	Storage Description
#1	0.000 m	10.6 m³	**2.16 mD x 2.90 mH Vertical Cone/Cylinder**

Device	Routing	Invert	Outlet Devices
#1	Primary	0.000 m	**41 mm Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=2.80 L/s @ 8.14 hrs HW=0.656 m (Free Discharge)
1=Orifice/Grate (Orifice Controls 2.80 L/s @ 2.12 m/s)

Pond 21P: Proposed 1 x 10,000L Rainwater Tank

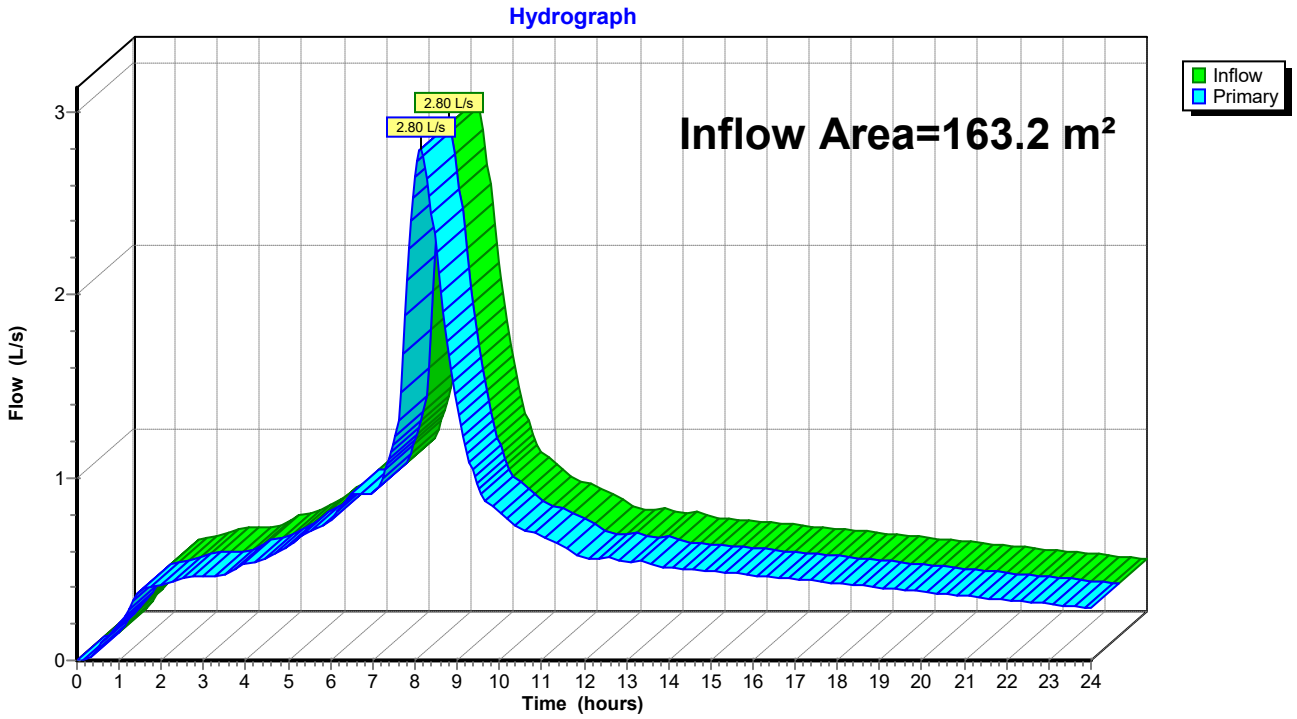


Summary for Link 22L: Post-Development

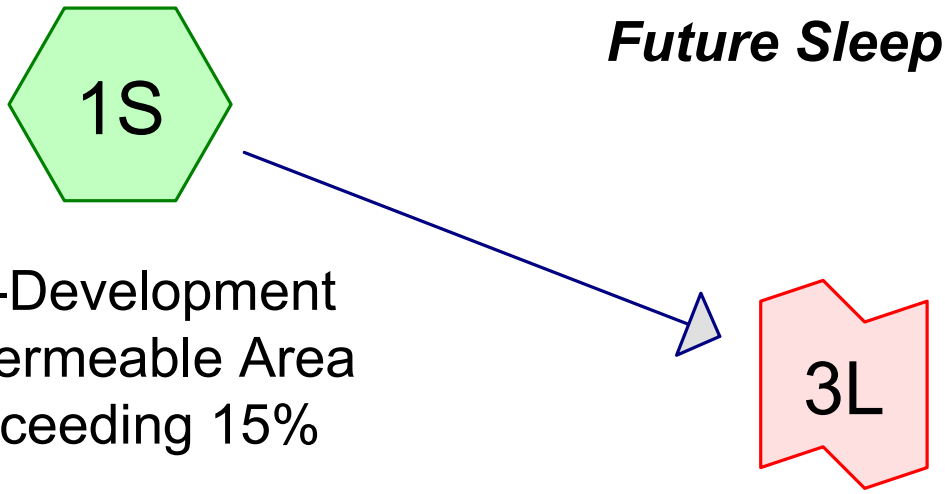
Inflow Area = 163.2 m²,100.00% Impervious, Inflow Depth > 321 mm for 1% AEP + 20% CCF event
Inflow = 2.80 L/s @ 8.14 hrs, Volume= 52.5 m³
Primary = 2.80 L/s @ 8.14 hrs, Volume= 52.5 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 22L: Post-Development



Pre-Development Scenario - Including Future Sleepout



Pre-Development Impermeable Area Exceeding 15%

Pre-Development

Subcat Reach Pond Link

Routing Diagram for 134493
Prepared by Wilton Joubert Limited, Printed 13/06/2024

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 1S: Pre-Development Runoff Area=193.2 m² 0.00% Impervious Runoff Depth>241 mm
Tc=10.0 min CN=74 Runoff=3.33 L/s 46.6 m³

Link 3L: Pre-Development Inflow=3.33 L/s 46.6 m³
Primary=3.33 L/s 46.6 m³

Summary for Subcatchment 1S: Pre-Development Impermeable Area Exceeding 15%

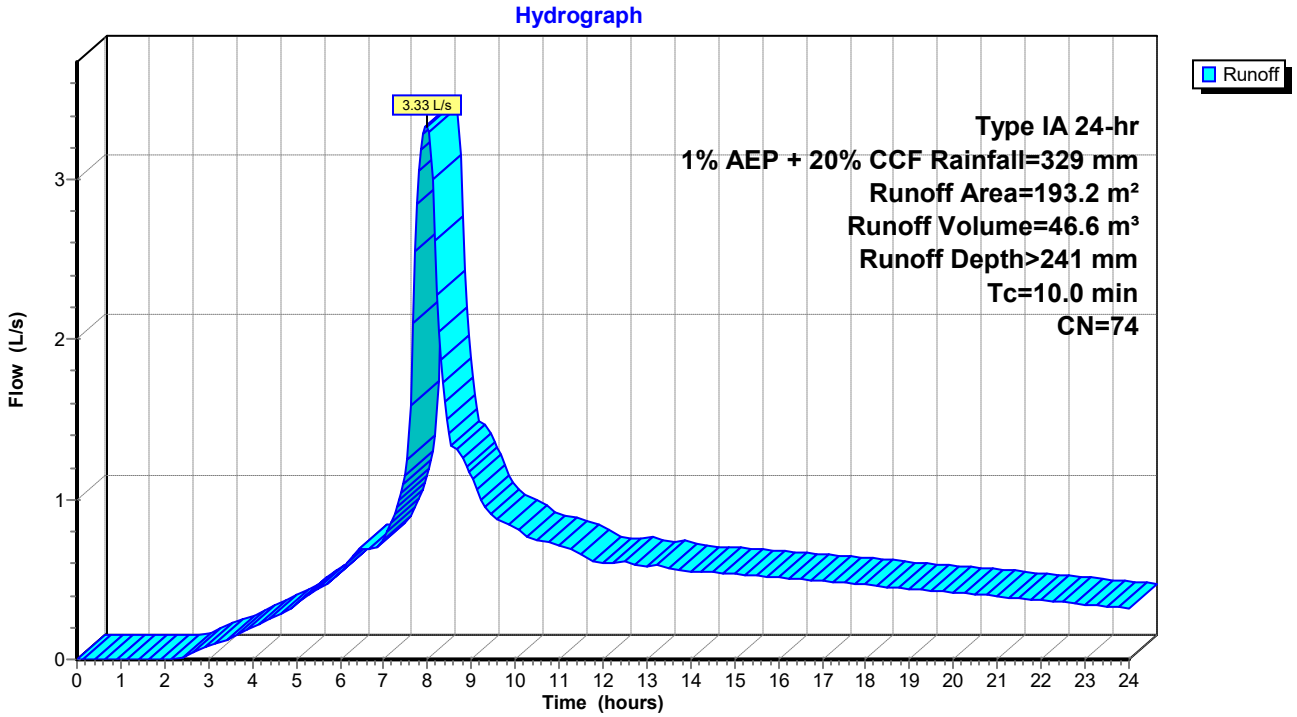
Runoff = 3.33 L/s @ 7.98 hrs, Volume= 46.6 m³, Depth> 241 mm

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=329 mm

Area (m²)	CN	Description
193.2	74	>75% Grass cover, Good, HSG C
193.2		100.00% Pervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 1S: Pre-Development Impermeable Area Exceeding 15%

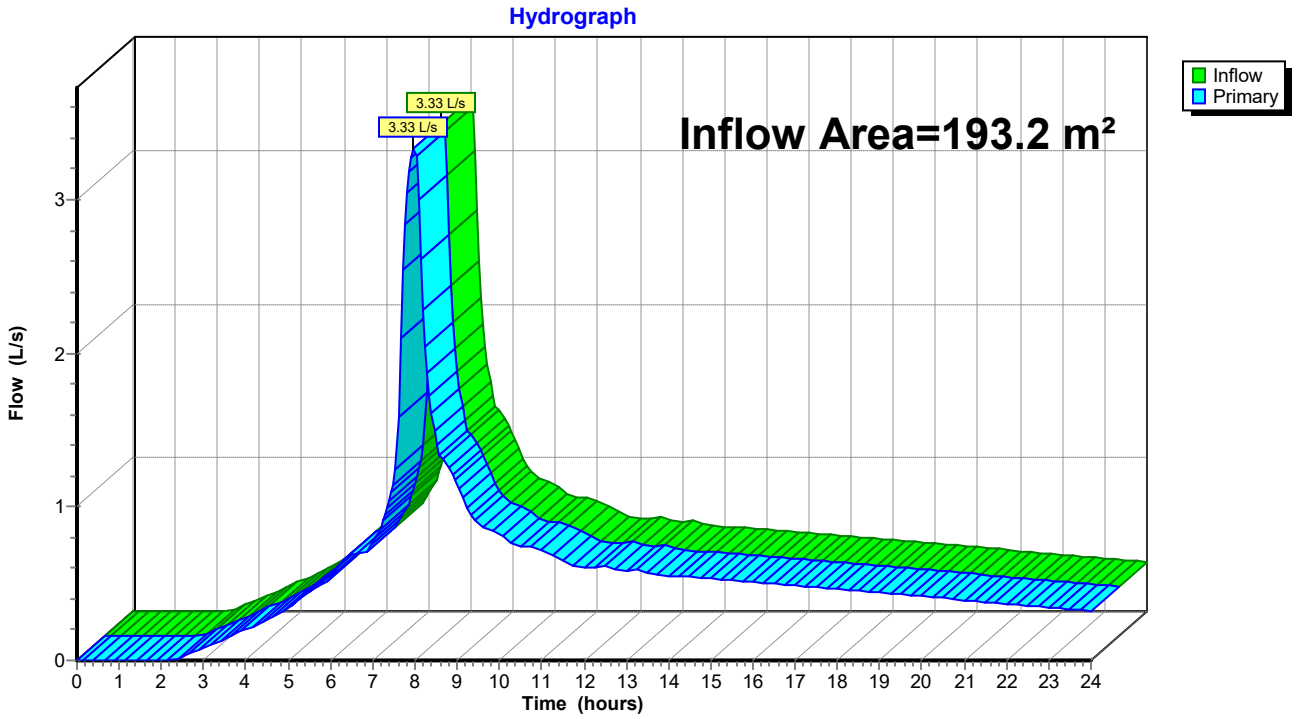


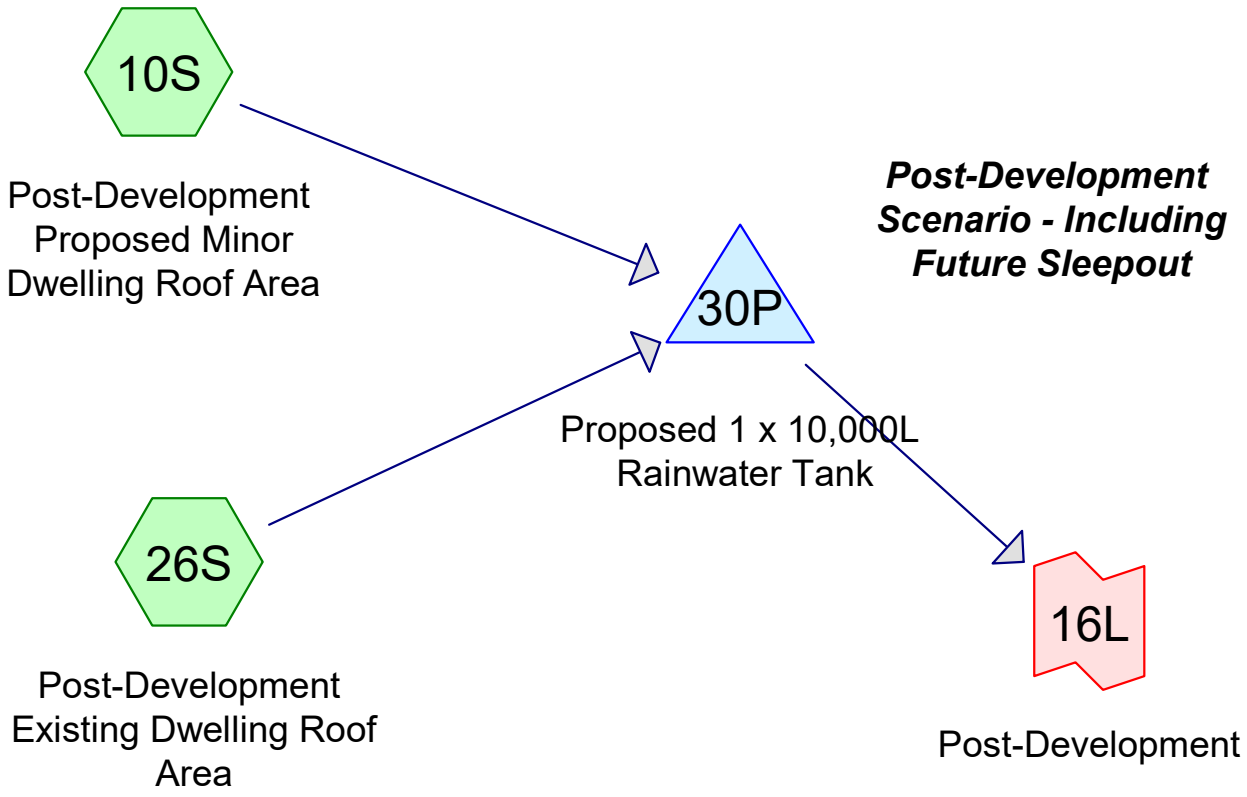
Summary for Link 3L: Pre-Development

Inflow Area = 193.2 m², 0.00% Impervious, Inflow Depth > 241 mm for 1% AEP + 20% CCF event
Inflow = 3.33 L/s @ 7.98 hrs, Volume= 46.6 m³
Primary = 3.33 L/s @ 7.98 hrs, Volume= 46.6 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 3L: Pre-Development





Subcat Reach Pond Link

Routing Diagram for 134493
Prepared by Wilton Joubert Limited, Printed 13/06/2024

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 10S: Post-Development Runoff Area=108.2 m² 100.00% Impervious Runoff Depth>322 mm
Tc=10.0 min CN=98 Runoff=2.35 L/s 34.8 m³

Subcatchment 26S: Post-Development Runoff Area=85.0 m² 100.00% Impervious Runoff Depth>322 mm
Tc=10.0 min CN=98 Runoff=1.84 L/s 27.4 m³

Pond 30P: Proposed 1 x 10,000L Rainwater Peak Elev=0.852 m Storage=3.1 m³ Inflow=4.19 L/s 62.2 m³
Outflow=3.20 L/s 62.1 m³

Link 16L: Post-Development Inflow=3.20 L/s 62.1 m³
Primary=3.20 L/s 62.1 m³

Summary for Subcatchment 10S: Post-Development Proposed Minor Dwelling Roof Area

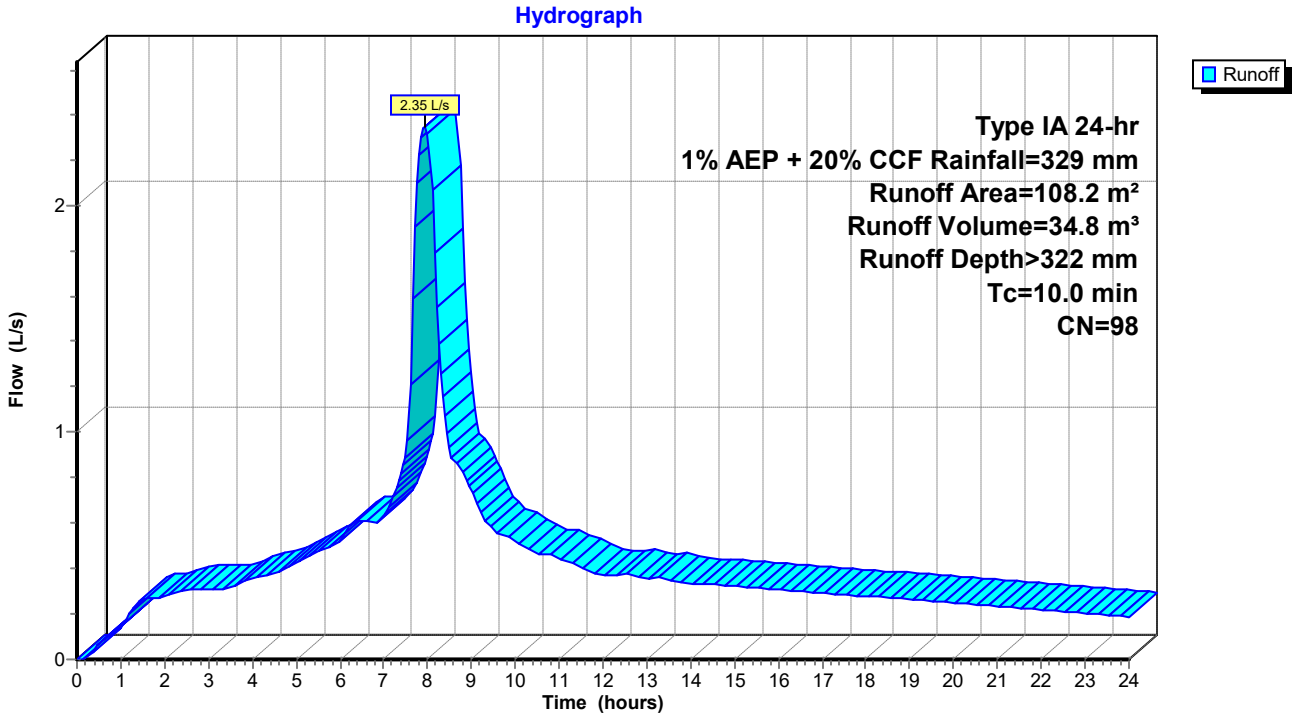
Runoff = 2.35 L/s @ 7.94 hrs, Volume= 34.8 m³, Depth> 322 mm

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=329 mm

Area (m²)	CN	Description
108.2	98	Roofs, HSG C
108.2		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 10S: Post-Development Proposed Minor Dwelling Roof Area



Summary for Subcatchment 26S: Post-Development Existing Dwelling Roof Area

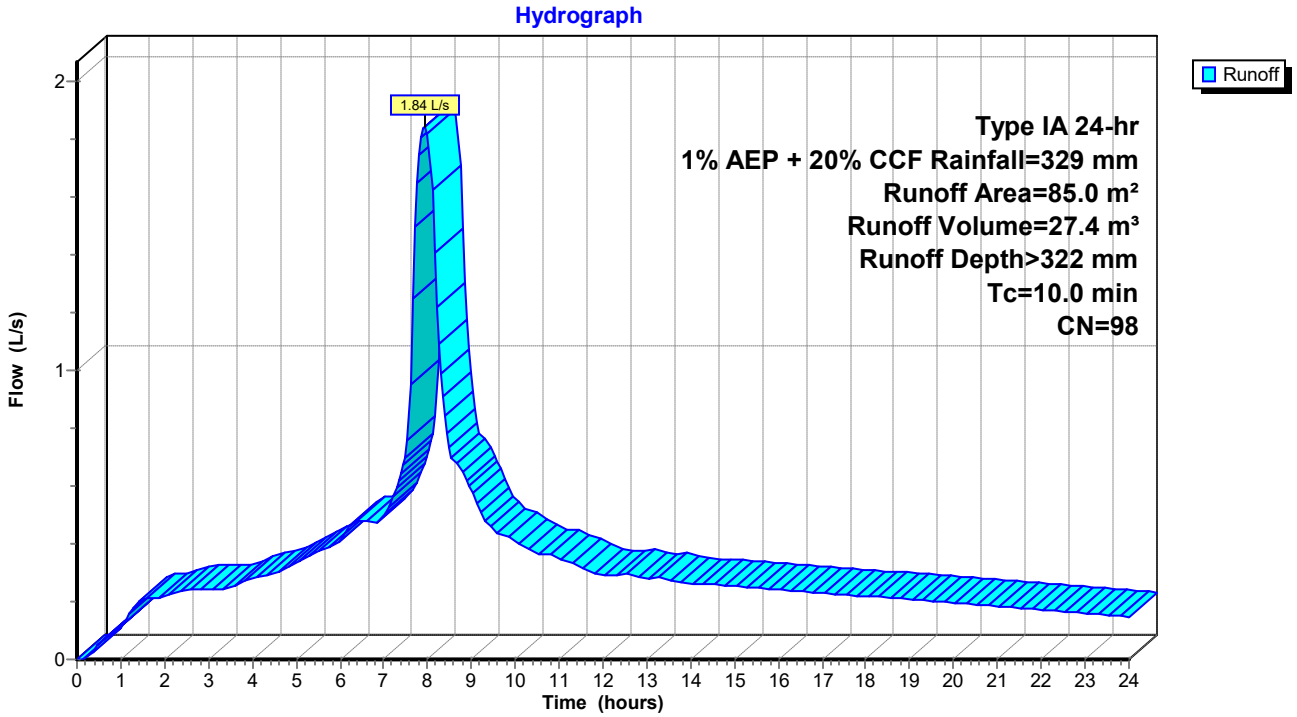
Runoff = 1.84 L/s @ 7.94 hrs, Volume= 27.4 m³, Depth> 322 mm

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=329 mm

Area (m²)	CN	Description
85.0	98	Roofs, HSG C
85.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 26S: Post-Development Existing Dwelling Roof Area



Summary for Pond 30P: Proposed 1 x 10,000L Rainwater Tank

Inflow Area = 193.2 m²,100.00% Impervious, Inflow Depth > 322 mm for 1% AEP + 20% CCF event
Inflow = 4.19 L/s @ 7.94 hrs, Volume= 62.2 m³
Outflow = 3.20 L/s @ 8.15 hrs, Volume= 62.1 m³, Atten= 24%, Lag= 12.9 min
Primary = 3.20 L/s @ 8.15 hrs, Volume= 62.1 m³

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 0.852 m @ 8.15 hrs Surf.Area= 3.7 m² Storage= 3.1 m³

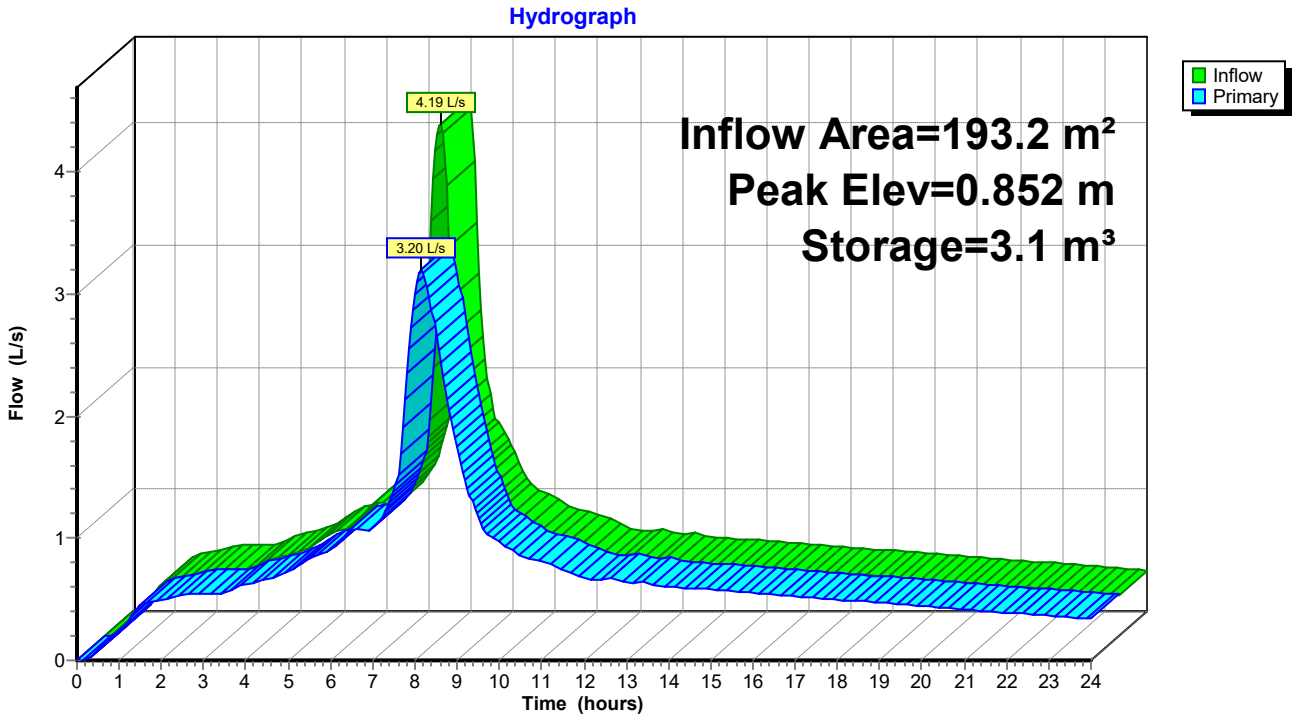
Plug-Flow detention time= 7.3 min calculated for 62.1 m³ (100% of inflow)
Center-of-Mass det. time= 5.9 min (649.2 - 643.3)

Volume	Invert	Avail.Storage	Storage Description
#1	0.000 m	10.6 m³	**2.16 mD x 2.90 mH Vertical Cone/Cylinder**

Device	Routing	Invert	Outlet Devices
#1	Primary	0.000 m	**41 mm Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=3.20 L/s @ 8.15 hrs HW=0.851 m (Free Discharge)
1=Orifice/Grate (Orifice Controls 3.20 L/s @ 2.42 m/s)

Pond 30P: Proposed 1 x 10,000L Rainwater Tank



Summary for Link 16L: Post-Development

Inflow Area = 193.2 m²,100.00% Impervious, Inflow Depth > 321 mm for 1% AEP + 20% CCF event
Inflow = 3.20 L/s @ 8.15 hrs, Volume= 62.1 m³
Primary = 3.20 L/s @ 8.15 hrs, Volume= 62.1 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 16L: Post-Development