



Application for resource consent or fast-track resource consent

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

1. Pre-Lodgement Meeting	
Have you met with a council Reto lodgement? Yes No	esource Consent representative to discuss this application prior o
2. Type of Consent being app	plied for
(more than one circle can be ti	cked):
Land Use	Discharge
Fast Track Land Use*	Change of Consent Notice (s.221(3))
Subdivision	Extension of time (s.125)
Consent under National Er (e.g. Assessing and Managin	
Other (please specify)	g Containmants in 30ii)
*The fast track is for simple land	use consents and is restricted to consents with a controlled activity status.
3. Would you like to opt out	of the Fast Track Process?
Yes No If we qualify	y it will be great to have this.
4. Consultation	
Have you consulted with lwi/Ha	apū? Yes No
If yes, which groups have you consulted with?	
Who else have you consulted with?	
For any questions or information re Council tehonosupport@fndc.gov	regarding iwi/hapū consultation, please contact Te Hono at Far North District

Name/s:	Angela Vujcich			
Email:				
Phone number:	Work	Home		
Postal address: (or alternative method o service under section 35 of the act)				
,		Postcode	0230	
. Address for Corres	pondence			
<u> </u>	·	using an Agent write their deta	ils here)	
Name/s:	Advance Build Ltd			
Email:				
Phone number:	Work	Home		
Postal address: (or alternative method o	PO Box 111, Kerikeri			
service under section 35				
of the act)		Postcode	0245	
		tance. Please advise us if you wo	uld prefer an	
Iternative means of cor	Owner/s and Occupier/s			
Liternative means of conditions 2. Details of Property Slame and Address of the	he Owner/Occupiers of the lan	d to which this application relation list on a separate sheet if requi		
Liternative means of conditions 2. Details of Property Slame and Address of the	he Owner/Occupiers of the lan			
ternative means of con Details of Property Iame and Address of to where there are multip	he Owner/Occupiers of the lan ple owners or occupiers please			

8. Application Site De	etails							
Location and/or prope	erty street address of the proposed activity:							
Name/s:								
Site Address/								
Location:	Location:							
	Postcode							
Legal Description:	Val Number:							
Certificate of title:								
	ch a copy of your Certificate of Title to the application, all ocumbrances (search copy must be less than 6 months o							
Site visit requirement	s:							
Is there a locked gate of	or security system restricting access by Council	staff? Yes No						
Is there a dog on the p	property? Yes No							
•	of any other entry restrictions that Council stafetaker's details. This is important to avoid a was							
9. Description of the	Proposal:							
	scription of the proposal here. Please refer to 0 or further details of information requirements.	•						
· ·	for a Change or Cancellation of Consent Notice Resource Consents and Consent Notice identi s for requesting them.	·						
10. Would you like to	request Public Notification?							
Yes No								

11. Other Consent required/being applied for under different legislation					
(more than one circle can be ticked):					
Building Consent Enter BC ref # here (if known)					
Regional Council Consent (ref # if known) Ref # here (if known)					
National Environmental Standard consent Consent here (if known)					
Other (please specify) Specify 'other' here					
12. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health:					
The site and proposal may be subject to the above NES. In order to determine whether regard needs to be had to the NES please answer the following:					
Is the piece of land currently being used or has it historically ever been used for an activity or industry on the Hazardous Industries and Activities List (HAIL) Yes No Don't know					
Is the proposed activity an activity covered by the NES? Please tick if any of the following apply to your proposal, as the NESCS may apply as a result. Yes No Don't know					
Subdividing land Disturbing, removing or sampling soil					
Changing the use of a piece of land Removing or replacing a fuel storage system					
Changing the use of a piece of land Removing or replacing a fuel storage system 13. Assessment of Environmental Effects: Every application for resource consent must be accompanied by an Assessment of Environmental Effects (AEE). This is a requirement of Schedule 4 of the Resource Management Act 1991 and an application can be rejected if an adequate AEE is not provided. The information in an AEE must be specified in sufficient detail to satisfy the purpose for which it is required. Your AEE may include additional information such as Written Approvals from adjoining property owners, or affected parties.					
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14. Billing Details:

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

Name/s: (please write in full)	Advance Build Ltd
Email:	
Phone number:	Work Home
Postal address: (or alternative method of service under section 352 of the act)	PO Box 111, Kerikeri
·	Postcode 0230

Fees Information

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

Declaration concerning Payment of Fees

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

Name: (please write in full)	Angela Vujcich		
Signature:			Date21-Nov-2025
(signature of bill payer		MANDATORY	

15. Important Information:

Note to applicant

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

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

Fast-track application

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

Privacy Information:

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

15. Important information continued...

Declaration

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

Name: (please write in full)

Signature:

Date 21-Nov-2025

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

Checklist (please tick if information is provided)

- Payment (cheques payable to Far North District Council)
- A current Certificate of Title (Search Copy not more than 6 months old)
- Details of your consultation with lwi and hapu
- 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.

Te Tii (Waitangi) B3 Trust



22 Te Kemara Avenue, Waitangi, 0200 PO BOX 273, Paihia, 0200 administrator@tetiiwaitangi.co.nz

Te Tii (Waitangi) B3 Trust Friday 10 October 2025

Confirmation of Appointment as Agent

Te Tii (Waitangi) B3 Trust

To Whom It May Concern,

This letter serves as formal confirmation of the appointment of Mrs. Pania Sigley, Company Secretary of Te Tii Limited Partnership (a subsidiary of Te Tii (Waitangi) B3 Trust), as an authorised agent acting on behalf of the Trust.

Mrs. Sigley is granted full authority to represent Te Tii (Waitangi) B3 Trust in all matters relating to land files associated with the Te Tii B3 Block, including relevant documentation held by the Far North District Council. This authority includes, but is not limited to, receiving and responding to correspondence and submitting documentation on behalf of the Trust.

Please direct all relevant communications, queries, and documentation requests to Mrs. Sigley in the first instance.

Should you require any further information or supporting documentation, you may contact Mrs. Sigley directly:

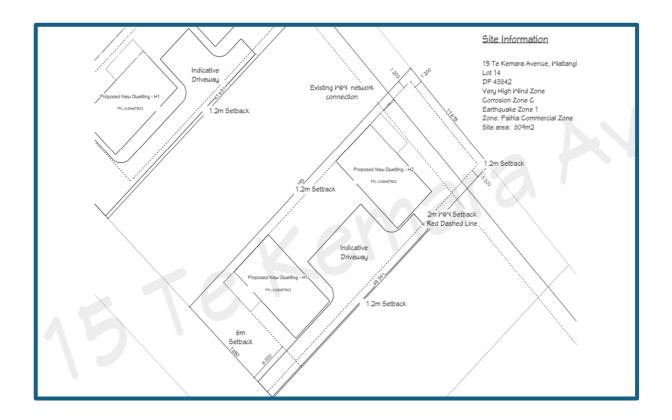
Email: secretary@tetiiwaitangi.co.nz

Phone: 027 687 8548

Yours sincerely,

George Riley

Trust Chair—Te Tii (Waitangi) B3 Trust



LANDUSE RESOURCE CONSENT APPLICATION

TO CONSTRUCT TWO DWELLINGS

15 TE KEMARA AVENUE, WAITANGI LOT 14 DP 43842

ASSESSMENT OF ENVIRONMENTAL EFFECTS

PREPARED FOR:

TE TII WAITANGI B3 TRUST

Rev A 15 OCTOBER 2025



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APPENDICES:

Appendix A – Site, Floor and Elevation Plans Appendix B – Certificate of Title Appendix C – Engineering Reports



1.0 THE APPLICANT AND PROPERTY DETAILS

То:	Far North District Council
Site address:	15 Te Kemara Avenue, Waitangi
Applicant's name:	Te Tii Waitangi B3 Trust
Address for service:	Advance Build Attn: Mark Day 2077 State Highway 10 Waipapa, 0295
Legal description:	Lot 14 DP 43842
Site area:	809m²
Site owner/s:	Te Tii (Waitangi) B3 Trust: Dr Maryann Baker George Frederick Riley Whati Rameka Melanie Jane Sweet Emma Hepi Marsha Elaine Davis Wiremu Leslue Tane
Operative District Plan:	Far North District Plan
Operative zoning:	Commercial Zone
Overlays/resource areas:	Commercial Zone: A1 Overlay
Proposed zoning/overlays:	Maori Purpose – Urban Coastal Erosion Hazard Zone (2 and 3) River Flood Hazard Zone (10/50/100 Year ARI Event) Coastal Flood Hazard Zone 3
Brief description of proposal:	To construct two residential dwellings in the Commercial Zone, breaching the following rules: • 7.7.5.1.5 Noise Mitigation for Residential Activities • 15.1.6C.1.2(c) Private Accessways in Urban Zones • 7.7.5.1.11 Stormwater
Summary of reasons for consent:	Overall, resource consent is required as a <u>Discretionary Activity</u> under the Far North District Plan.

AUTHOR

Mark Day

Design & Planning I BAS (Technology) I DESIGN & CARPENTRY LBP I

Date: 15 October 2025



2.0 PROPOSAL

The applicants, Te Tii Waitangi B3 Trust (The Trust), are an ahu whenua trust constituted under section 215 of the Te Ture Whenua Māori Act 1993. The Trust administers 70 freehold blocks located in Waitangi, including the subject site which is located at 15 Te Kemara Avenue and legally described as Lot 14 DP 43842.

The proposal is to construct two residential dwellings on the subject site, in the Commercial Zone. Resource consent is required under the following rules:

- 7.7.5.1.5 Noise Mitigation for Residential Activities
- 15.1.6C.1.2(c) Private Accessways in Urban Zones
- 7.7.5.1.11 Stormwater

All necessary engineering reports have been prepared in support of the proposed development, as attached at **Appendix C**.

A comprehensive district plan assessment has been provided in Section 4.0 below.

Overall, the application has been assessed as a Discretionary Activity under the ODP.

The following Assessment of Environmental Effects (AEE) has been prepared in accordance with the requirements of Section 88 of and Schedule 4 of the Resource Management Act 1991 (the Act) and is intended to provide the information necessary for a full understanding of the activity for which consent is sought and any actual or potential effects the proposal may have on the environment.

3.0 SITE CONTEXT

The subject site is located at 3 Te Kemara Avenue in the centre of the Waitangi township. The site is legally described as Lot 14 DP 43842 (NA13A/723) and is within Māori Freehold Land. A copy of the relevant Certificate of Title (CT) is attached as **Appendix B**.





The site is zoned Commercial and is subject to the Commercial Zone: A1 Overlay under the ODP. The site is also located within the NRC Coastal Environment.

Under the PDP, the subject site is zoned Maori Purpose – Urban.

In terms of natural hazards, the site is partially subject to the following:

- Coastal Erosion Hazard Zone (2 and 3)
- River Flood Hazard Zone (10/50/100 Year ARI Event)
- Coastal Flood Hazard Zone 3

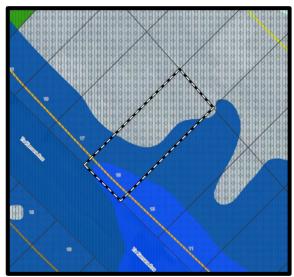


Figure 2: Map showing extent of flood susceptibility (Far North PDP Maps)

While zoned Commercial, the immediate surrounding environment is largely characterised by residential development, with the exception of the Waitangi Treaty Grounds.

The subject site is currently vacant. However, based on a search of Council's property file, it is understood that residential development has previously occurred on the site.

There are no significant areas of indigenous vegetation or habitats of indigenous fauna.

A review of the New Zealand Archaeological Association (NZAA) database shows that there are no registered archaeological features within the subject site.

Access to the subject site is currently gained via an existing vehicle crossing off Te Kemara Avenue which will be upgraded to meet the Council's Engineering Standards.





Figure 3: Image showing existing vehicle crossing to subject site (Google Streetview)

4.0 FAR NORTH DISTRICT PLAN ASSESSMENT

Table 1 – Assessment of Commercial Zone and District-Wide provisions

Commercial Zone/ Paihia Area A1 (ODP)	Permitted Standards	Comment
7.7.5.1.1 Building height	Maximum 8.5m	As per the plans provided, the proposed dwellings will be less than 8.5m in height.
		Permitted
7.7.5.1.2 Sunlight	2m + 45-degree recession plane when measured inwards from nearest site boundary which adjoins Residential	Not applicable. The subject site does not adjoin the Residential Zone.
	Zone	Permitted
7.7.5.1.3 Visual amenity and environmental protection	(a) Not applicable (b) At least 50% of that part of the site between the road boundary and a parallel line 3m therefrom, which is not occupied by buildings or driveways, shall be landscaped. (c) Any landscaping required by these rules shall remain on the site for the duration of the activity and be maintained, and, if such landscaping dies or becomes diseased or damaged, shall be replaced. Note: It is recommended that any landscaping required by these rules shall incorporate measures outlined for Low Impact Design principles to retain, treat	As per the site plan, a 6.5m wide grassed area near the road boundary will be maintained.
	and/or dispose of stormwater generated on the site.	Permitted

Commercial Zone/ Paihia Area A1 (ODP)	Permitted Standards	Comment
7.7.5.1.4 Setback from boundaries	In the Paihia Commercial Zone: A1, a minimum setback distance of 6m from the road boundary.	As per the site plan, the minimum setback distance from the road boundary will be 6.5m.
		Permitted
7.7.5.1.5 Noise Mitigation for Residential Activities	Any new residential activity involving permanent or non-permanent accommodation shall be developed in such a way that the attenuation of noise between any boundary and living room is no less than 20 dB, and between any boundary and any room used for sleeping is no less than 30 dB. In the absence of forced ventilation or air-conditioning, these reductions shall be achieved with any exterior windows open.	Given the subject site and the immediate surrounding environment are largely characterised by residential development, it is considered that an acoustic design report to comply with commercial standards is not necessary in this instance. This notion is supported by the proposed rezoning of the subject site to 'Maori Purpose – Urban' where the relevant provisions do not require an acoustics report for new residential activities.
	The Council will require an acoustic design report prepared by a suitably qualified and experienced person demonstrating compliance with this requirement prior to issuing any Certificate of Compliance under s139 of the Act.	Restricted Discretionary Activity
7.7.5.1.6 Transportation	Permitted: Two parking spaces per unit Adequate manoeuvring area Concrete or sealed driveway	Two parking spaces per unit and adequate manoeuvring area will be provided. The vehicle crossing to the subject site will be concreted at least 5m inwards from the road edge. However, the internal driveway will be gravel.
		Discretionary Activity
7.7.5.1.8 Noise	(a) All activities within the zone shall be conducted so that noise measured at any point within any other site in the zone shall not exceed: 0700 to 2200 hours 65 dBA L10 2200 to 0700 hours 55 dBA L10 and 80 dBA Lmax	The proposal is for a residential activity and will be able to comply with this rule.
	(b) All activities within the zone shall be conducted so as to ensure that noise measured at any point within any site in the Residential, Coastal Residential or Russell Township Zones or at or within the notional boundary of any other dwelling in any other rural or coastal zone shall not exceed: 0700 to 2200 hours 55 dBA L10 2200 to 0700	
	hours 45 dBA L10 and 70 dBA Lmax	Permitted



Commercial Zone/ Paihia Area A1 (ODP)	Permitted Standards	Comment
7.7.5.1.11 Stormwater	The disposal of collected stormwater from the roof of all new buildings and new impervious surfaces provided that the activity is within an existing consented urban stormwater management plan or discharge consent	There is no public stormwater network available to the site. Onsite soakage pits are therefore required. Discretionary Activity

Overall, the proposal requires resource consent as a <u>Discretionary Activity</u> under the Far North District Plan.

5.0 NES CONTAMINATED SOILS (NESCS)

All applications that involve subdivision, or an activity that changes the use of a piece of land, or earthworks are subject to the provisions of the NES Contaminated Soils. The regulation sets out the requirements for considering the potential for soil contamination, based on the HAIL (Hazardous Activities and Industries List) and the risk that this may pose to human health as a result of the proposed landuse.

Based on a search of Council records, historic aerial images, and the documentation provided in support of this application, there is no evidence to suggest that a HAIL activity is, has been, or is more than likely to not have been undertaken on any part of the site. Therefore, the NES Contaminated Soils is not applicable in this instance.

6.0 NES FRESHWATER (NESFW)

A review of aerial images, including NRC's wetland maps, reveal no evidence to suggest that there are any wet areas that may be subject to the NES Freshwater provisions. Therefore, no further assessment is required under the NES Freshwater.

7.0 NPS INDIGENOUS BIODIVERSITY (NPS-IB)

As discussed earlier in the report, the subject site does not contain any significant areas of indigenous vegetation or habitats of indigenous fauna.

8.0 NPS HIGHLY PRODUCTIVE LAND (NPSHPL)

As shown on Far North LUC Maps, the site does not contain any highly versatile soils. The NPSHPL is therefore not applicable in this instance.



9.0 NOTIFICATION

Public Notification

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

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

Section 95A(3) an application must be publicly notified if:

- a) the applicant has requested that the application be publicly notified;
- b) public notification is required under Section 95C.

The applicant is not requesting public notification under clause (a). Clause (b) provisions relate to where an applicant does not provide further information formally requested under Section 92, which is not applicable in this case.

Public notification is not required and therefore Step 2 must be considered.

Step 2: If not required by Step 1, public notification precluded in certain circumstances Under Section 95A (4) an application must not be publicly notified if:

- 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 public notification;
- b) the application is for a resource consent for 1 or more of the following, but no other, activities:
 - i. a controlled activity;
 - ii. a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity:

None of the above criteria apply, therefore public notification is not precluded in this instance. Step 3 must be considered.

Step 3: If not precluded by step 2, public notification required in certain circumstances Under Section Under Section 95A(7), public notification is required if:

- a) the application is 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:
- b) 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. Clause (a) does not apply in this situation.

An assessment of environmental effects in accordance with s95D has been undertaken in Section 8.0 below which concludes that any adverse effect arising as a result of the proposed development will be less than minor. Public notification is therefore not required in this instance.

Step 4: Public notification in special circumstances

Section 95A(9) sets out that the council is required to determine whether special circumstances exist that warrant it being publicly notified. *Special circumstances are those that are:*

- exceptional or unusual, but something less than extraordinary; or
- outside of the common run of applications of this nature; or



• circumstances which make notification desirable, notwithstanding the conclusion that the adverse effects will be no more than minor.

There are no special circumstances that apply to the subject site.

Public Notification Conclusion

Based on the above, it is considered that this application can be processed without public notification.

Limited Notification

Under Section 95B, if an application is not publicly notified, the Council must decide if there are any 'affected persons' and undertake limited notification to those persons. Under Section 95E(1) a person is considered 'affected' if the adverse effects of the activity on that person are 'minor or more than minor'. If the application is not publicly notified, the consent authority must follow the following steps to determine whether to give limited notification of an application.

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

Step 1 requires limited notification where there are any affected protected customary rights groups or customary marine title groups, or affected persons under a statutory acknowledgement affecting the land.

The above does not apply to this land.

Step 2: If not required by step 1, limited notification precluded in certain circumstances Step 2 describes that limited notification is precluded where all applicable rules and NES preclude limited notification; or the application is for a controlled activity (other than the subdivision of land) or a prescribed activity under section 360H(1)(a)(ii).

None of the above apply in this instance.

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

In the case of a boundary activity, Council shall determine in accordance with section 95E whether an owner of an allotment with an infringed boundary is an affected person.

In the case of any other activity, Council shall determine whether a person is an affected person in accordance with section 95E.

If yes to any of the above, Council shall notify each affected person identified under subsections (7) and (8) of the application.

As per the assessment of effects, it is considered that any potential adverse effects will be less than minor such that no written approvals have been requested.

Step 4: Further notification in special circumstances

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

As previously discussed, special circumstances are not considered to apply to this proposal.



Limited Notification Conclusion

Having undertaken the s95B limited notification tests, it is considered that this application can be processed without limited notification.

10.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

In accordance with Section 88(2)(b) of the Act and Clause 1(d) of Schedule 4, this assessment of environmental effects of the proposed activity has been prepared in such detail as corresponds with the scale and significance of the effects it may have on the environment.

Noise Mitigation for Residential Activities

In assessing an application resulting from a breach of Rule 7.7.5.1.5 Noise Mitigation for Residential Activities the matters to which the Council will restrict its discretion are:

(a) the degree of noise attenuation achieved by the residential activity, taking into account the risk of exposure to noise from activities in the vicinity.

Comment: As mentioned above, the subject site is located in a well-defined residential area. With the exception of the Treaty Grounds which are located across the road from the subject site, all adjoining properties are currently in residential use. Based on a review of aerial images, the nearest commercial activity is located at least 240m to the south of the subject site, being Waitangi Woolworths. On this basis, it is considered that the risk of exposure to noise from neighbouring activities is minimal such that additional noise attenuation to a commercial standard is not warranted in this instance.

(b) the hours of operation of the adjoining activity that is generating the noise;

Comment: As above. The nearest commercial activity is located at least 241m to the south of the subject site, being Waitangi Woolworths, and is not adjoining.

(c) the timing and duration of the noise from adjoining sites that is affecting the site of the application.

Comment: As above.

Transportation

As per the site plans provided, the proposal is able to comply with all relevant transportation rules except Rule 15.1.6C.1.2(c) Private Accessways in Urban Zones which requires all private accessways in the Commercial Zone that serve two or more activities to be sealed or concreted.

While the proposed vehicle crossing off Te Kemara Avenue will be concreted at least 5m inwards from the existing road edge, the internal driveway will be gravelled which is considered to be the most practical and appropriate option for the proposed activities. The gravel driveway will not affect



the adequacy of sight distances available at the access location, nor will it contribute to any traffic safety or congestion issues in the area.

Given the proposal is for a residential activity where the maximum TIF will be 20 one-way daily traffic movements, there are no foreseeable changes in traffic patterns in the area. As per the attached engineering plans and reports, stormwater runoff will be managed appropriately.

Stormwater

The site does not have access to a reticulated stormwater network. The previous dwelling (now demolished) utilised on-site soakage for stormwater disposal. It is proposed is to use an Attenuation tank and soakage pit for the new dwellings.

The proposed impervious areas on the development site will be directed to drain into the proposed attenuation tank and then the overflow to the soakage device associated with each site. Refer to the Stormwater report prepared by RS Eng Ltd attached as Appendix C.

Conclusion

Based on the above, it is considered that any adverse effects as a result of the proposal will be less than minor.

11.0 SECTION 104 ASSESSMENT

Assessment of Effects

Section 104(1)(a) requires consideration of any actual and potential effects on the environment of allowing the activity. This has been carried out in the assessment above. The conclusion reached overall is that the adverse effects of granting consent to the proposal are less than minor. Some positive effects will arise from the development, including:

- The provision for cultural well-being of the applicants and wider whānau;
- The provision of social well-being through addressing the current housing shortage in the Far North;
- The proposed development will also provide for the economical well-being of the Far North District through providing employment opportunities throughout the construction phase.

Therefore, the effects are considered acceptable in the receiving environment.

National and Regional Planning Documents

Other than those discussed earlier, there are no other national or regional planning documents directly relevant to this application.

Operative Far North District Plan – Objectives and Policies

Given the approvals sought by this application slightly deviate from the relevant objectives and policies in the Commercial Zone, a full assessment of the objectives and policies contained within



this chapter would not seem overly useful in this instance. However, it is considered that the proposed development is not contrary to the relevant objectives and policies for the following reasons:

- The proposed development is consistent with existing development patterns in the immediate surrounding environment, which is clearly defined as a residential area, despite the commercial zoning.
- The above notion is further supported by the PDP where it is proposed to rezone the site to Māori Purpose Urban where residential activities are a permitted activity.
- Council's property file shows that residential activities have previously occurred on the site as per previous Council approvals.

On the basis of the above assessment, it is considered that the proposed development is not contrary to the relevant objectives and policies of the District Plan.

Proposed Far North District Plan – Objectives and Policies

As of Monday 4 September 2023, the further submission period on the PDP has closed. However, Council are yet to make a decision on submissions made and publicly notify this decision. Therefore, the application shall only 'have regard to' the relevant objectives and policies in the PDP. Relevant objectives and policies in the PDP are contained within the Māori Purpose chapter.

Based on the AEE, it is considered that the proposal is largely consistent with the anticipated outcome of the relevant objectives and policies, particularly the following:

- MPZ-01 to MPZ-03
- MPZ-P1 to MPZ-P4

Other Matters

There are no other matters considered relevant to the proposal.

12.0 PART 2 ASSESSMENT

As per current case law, an assessment of matters under Part 2 is only required where there is invalidity, incomplete coverage or uncertainty in the planning provisions. The Operative District Plans contain provisions that are relevant to the proposal, and there is no evidence to suggest the relevant provisions are invalid, incomplete or present uncertainty in making any decision. No assessment of the Part 2 provisions is therefore required.

13.0 OVERALL CONCLUSION

The applicants, Te Tii Waitangi B3 Trust (The Trust), propose to construct two residential dwellings on the subject site, in the Commercial Zone. Resource consent is required under the following rules:

- 7.7.5.1.5 Noise Mitigation for Residential Activities
- 15.1.6C.1.2(c) Private Accessways in Urban Zones
- 7.7.5.1.11 Stormwater



All necessary engineering reports have been prepared in support of the proposed development, as attached at **Appendix C**.

Based on the assessment of effects above, it is concluded that any potential adverse effects on the existing environment and potentially affected parties would be no more than minor and can be managed in terms of appropriate conditions of consent.

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

<u>AUTHOR</u>

Mark Day

Design & Planning I BAS (Technology) I DESIGN & CARPENTRY LBP I

Date: 15 October 2025

APPENDICES:

Appendix A – Site, Floor and Elevation Plans Appendix B – Certificate of Title Appendix C – Engineering Reports



Appendix A – Site, Floor and Elevation Plans

Proposed New Dwelling

15 Te Kemara Ave, Waitangi

For: Te Tii(Waitangi) B3 Trust





A smarter move

CONTENTS

PO1 SITE LOCATION PLAN

POIA SITE PLAN

PO2 FLOOR PLAN

PO3 ELEVATIONS

PO4 ELECTRICAL PLAN

PO5 FITTING PLAN

P06 KITCHEN PLAN

Concept Plans

Concept 1 August 2025

REVISION:
PROJECT NO.
DRAWN BY:
HC:

C01 D. 1288 NMB JCS



NB: Boundary Lines are Indicative Only



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Proposed New Home for: Te Tii(Waitangi) B3 Trust 15 Te Kemara Ave., Waitangi

(Typology 1)

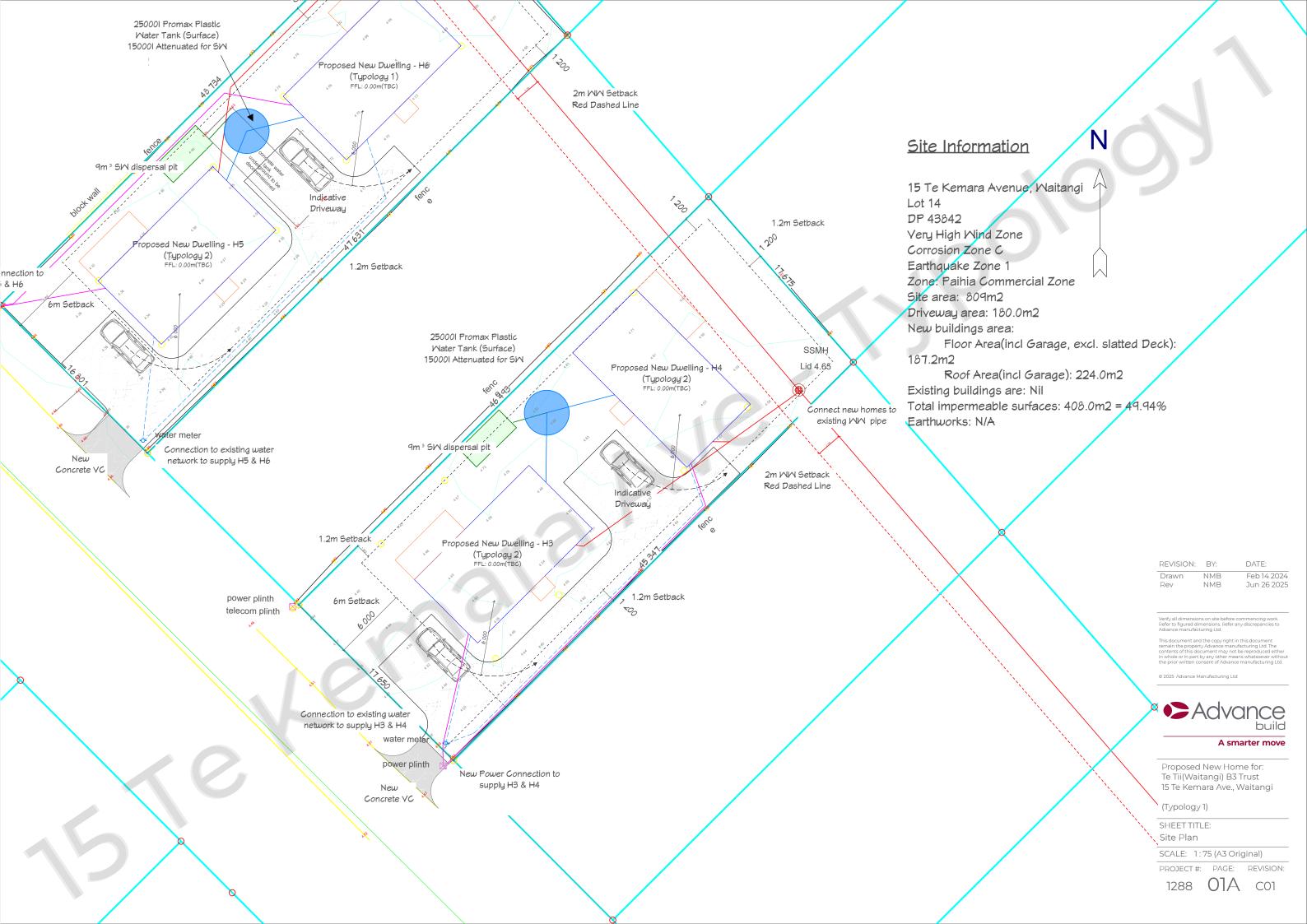
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SCALE: NTS

PROJECT#: PAGE: REVISION:

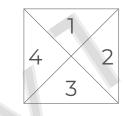
1288

C01

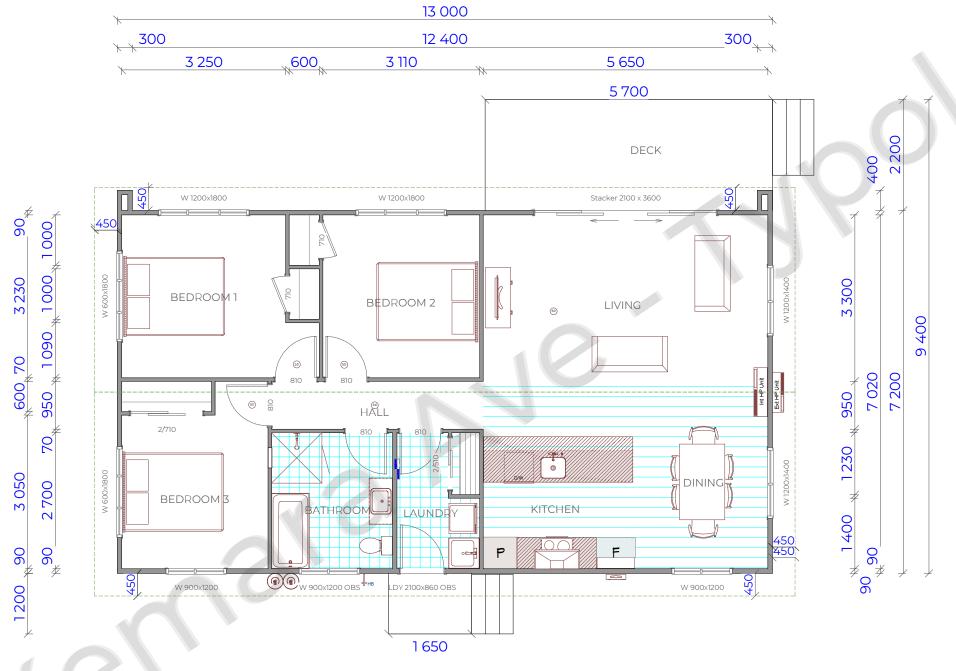


Typology 1

Roof Pitch 15 deg Stud height - 2.4m Flat Ceiling







3 230

04 009

3 050

+	1780 10	50	2 400	1020 550	3 020		2 630		
+	2 900	#	2 400	1640		5 650			
				13 000					
				LIVING AREA		1000mm	0	1m	2m

REVISION:	BY:	DATE:
Drawn	NMB	Feb 15 2025
Rev	NMB	Feb 21 2025
Rev	NMB	Jun 26 2025



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Proposed New Home for: Te Tii(Waitangi) B3 Trust 15 Te Kemara Ave., Waitangi

(Typology 1)

SHEET TITLE: Floor Plan

SCALE: 1:75 (A3 Original)

PAGE:

1288



P01

Roof Pitch 15 deg Stud height - 2.4m Flat Throughout

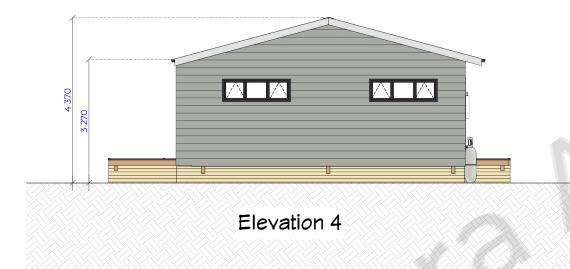
Meathertex Primelok Smooth 200mm - Main Cladding

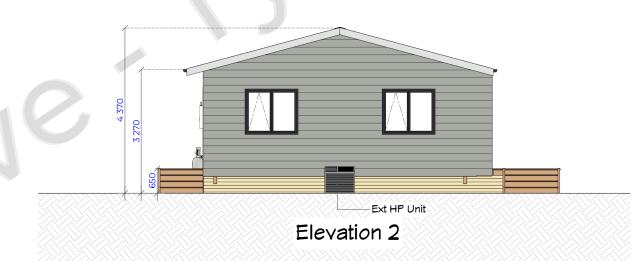
Secondary Feature Cladding -Weathertex Weathergroove 150mm cladding - To Elevation 1 - between Wing Walls



Armorsteel 5-Rib, UltraZen

Double glazed windows





REVISION: BY DATE:
Drawn KAT Aug 06 2025

verify all dimensions on site before commencing work. Refer to figured dimensions. Refer any discrepancies to Advance manufacturing Ltd.

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Proposed New Home for: Te Tii(Waitangi) B3 Trust 15 Te Kemara Ave., Waitangi

(Typology 1)

SHEET TITLE: Elevation

SCALE: 1:100 (A3 Original)

SCALE. 1.100 (AS

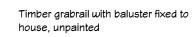
PROJECT #: PAGE:

1288 (

03

REVISION:

C01



140x35 Premium smooth H3 Pine decking - uncoated, Nail Fixed

140×20 PG H3 Pine baseboards Unpainted



Proposed New Dwelling

15 Te Kemara Ave, Waitangi

For: Te Tii(Waitangi) B3 Trust





A smarter move

CONTENTS

POI SITE LOCATION PLAN

POIA SITE PLAN

PO2 FLOOR PLAN

PO3 ELEVATIONS

PO4 ELECTRICAL PLAN

PO5 FITTING PLAN

P06 KITCHEN PLAN

Concept Plans

Concept 1 August 2025

REVISION:
PROJECT NO.
DRAWN BY:
HC:

C01

NMB

JCS



NB: Boundary Lines are Indicative Only

Drawn NMB Jul 04 2025

Verify all dimensions on site before commencing work. Refer to figured dimensions. Refer any discrepancies to Advance manufacturing Ltd.

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A smarter move

Proposed New Home for: Te Tii(Waitangi) B3 Trust 15 Te Kemara Ave., Waitangi

(Typology 2)

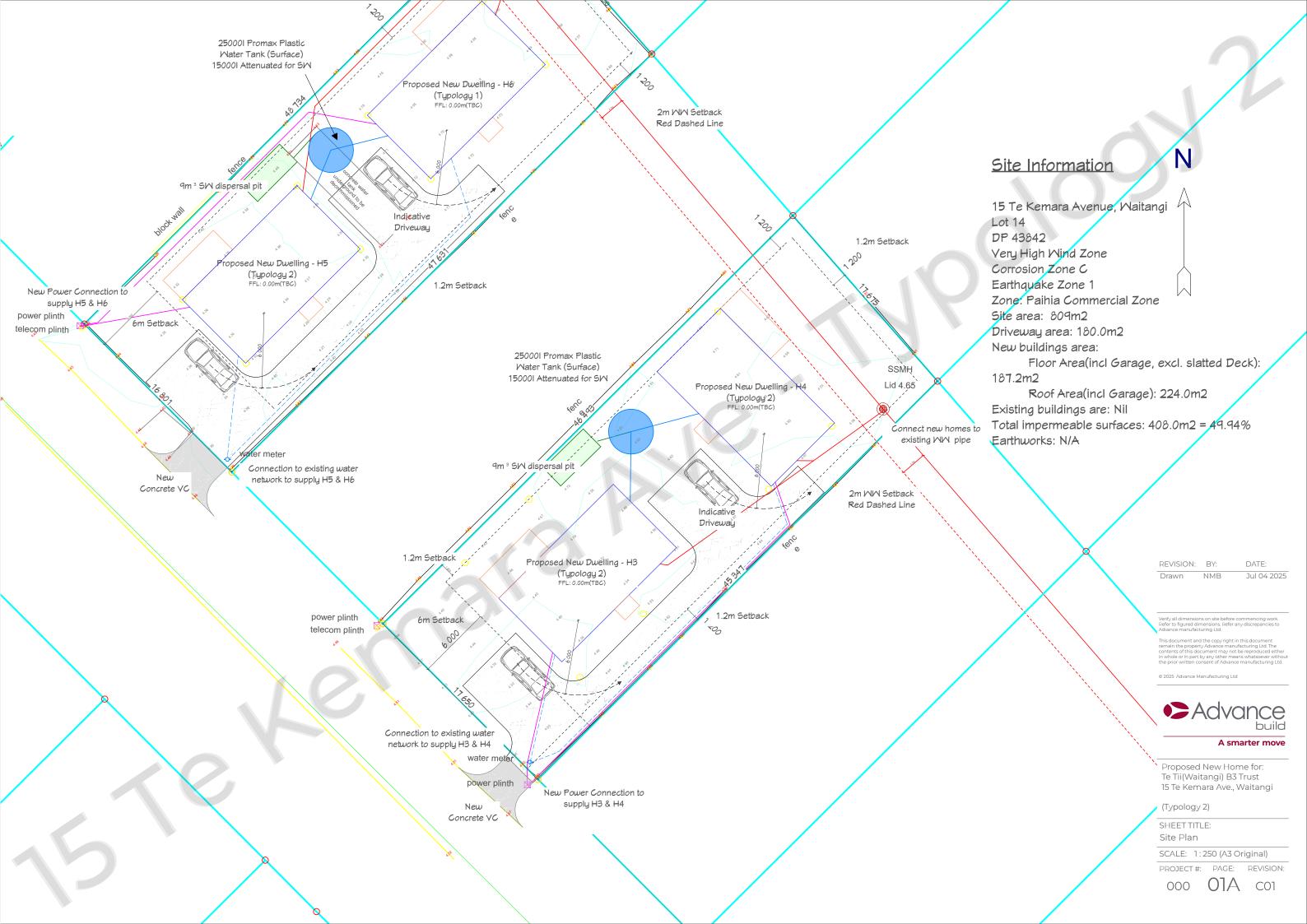
SHEET TITLE:
Site Location Plan

SCALE: NTS

PROJECT #:

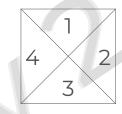
REVISION

: C01

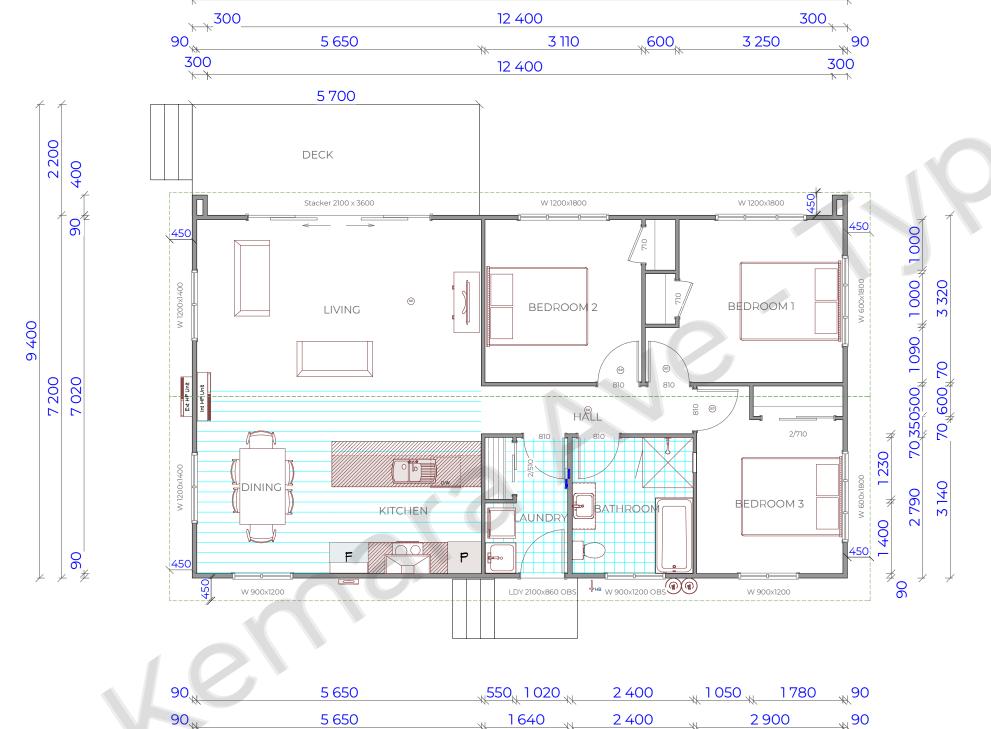


Typology 2

Roof Pitch 15 deg Stud height - 2.4m Flat Ceiling



Elevations



13 000

LIVING AREA 93.6 SQ M

1000mm

1m

13 000

REVISION: BY: DATE:
Drawn NMB Jul 09 2025

Verify all dimensions on site before commencing work Refer to figured dimensions. Refer any discrepancies t Advance manufacturing Ltd.

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Proposed New Home for: Te Tii(Waitangi) B3 Trust 15 Te Kemara Ave., Waitangi

(Typology 2)

SHEET TITLE: Floor Plan

SCALE: 1:75 (A3 Origin

PROJECT #: PAGE: R

000

2

P01

Roof Pitch 15 deg Stud height - 2.4m Flat Throughout

Weathertex Primelok Smooth 200mm - Main Cladding

Weathergroove Natural 150mm Vertical Groove - Stained (To Elevation 1 between Wing Walls) - Secondary Cladding



Armorsteel 5-Rib, Standard 0.40mm

Double glazed windows





DATE: Aug 06 2025



A smarter move

Proposed New Home for: Te Tii(Waitangi) B3 Trust 15 Te Kemara Ave., Waitangi

(Typology 2)

SHEET TITLE: Elevation

SCALE: 1:100 (A3 Original)

PROJECT #: PAGE: REVISION:

000

C01

Timber grabrail with baluster fixed to house, unpainted

140x35 Premium smooth H3 Pine decking uncoated, Nail Fixed

140x20 PG H3 Pine baseboards Unpainted



Appendix B – Certificate of Title



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 NA13A/723

Land Registration District North Auckland

Date Issued 07 May 1968

Prior References NA1692/83

Estate Fee Simple

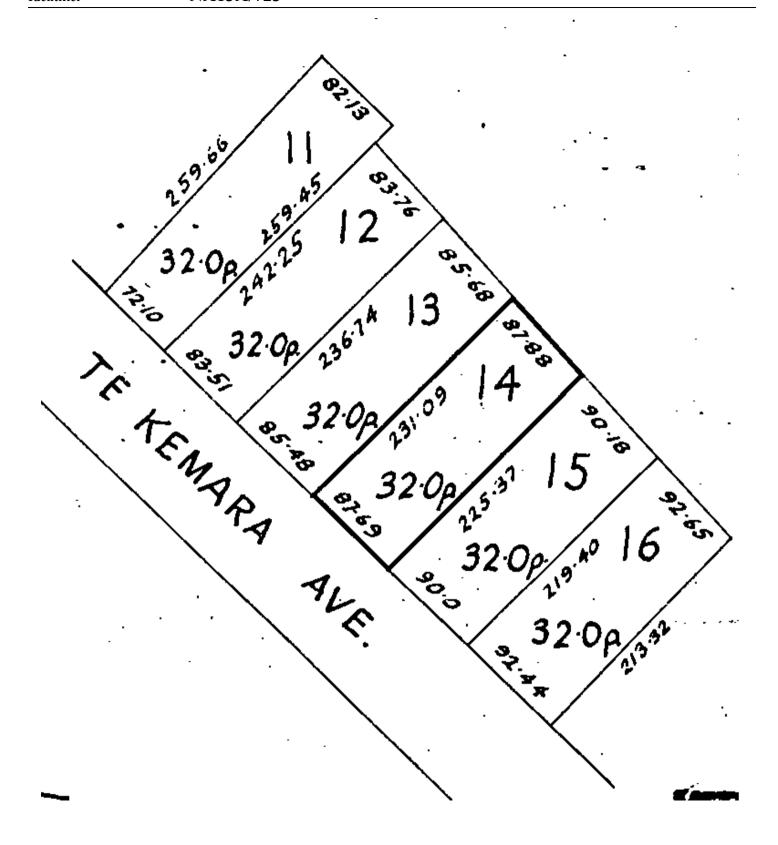
Area 809 square metres more or less
Legal Description Lot 14 Deposited Plan 43842

Registered Owners

Dr. Maryanne Baker, George Frederick Riley, Whati Rameka, Melanie Jane Sweet, Emma Hepi, Marsha Elaine Davis and Wiremu Leslie Tane as responsible trustees jointly, no survivorship

Interests

D143534.1 STATUS ORDER DETERMINING THE STATUS OF THE WITHIN LAND TO BE MAORI FREEHOLD LAND - 14.5.1997 AT 9.30 AM





Report on Maori Land details for the following Record(s) of Title



Record(s) of Title NA13A/723

Identified as potentially Maori Freehold Land

*** End of Report ***

Appendix C – Engineering Reports



File: 19780

21 August 2025

Issue: 1

FLOOD REPORT

3, 15 and 19 Te Kemara Avenue, Waitangi

(Lots 12, 14 & 20 DP 43841)

1.0 Introduction

RS Eng Ltd (RS Eng) has been engaged by Advance Build assess the flood hazard at 3, 15 and 19 Te Kemara Avenue, Waitangi for residential construction.

The client proposes to construct two, single storey, timber floored dwellings on each of the aforementioned properties.

2.0 Flood Assessment

The Northland Regional Council has designated the property as being susceptible to river flooding. Part of the properties and building areas is mapped as potentially susceptible to inundation during the 10-year, 50-year, and 100-year annual exceedance probability (AEP) river flood event.



Figure 1: Region Wide Model Mapping NRC.



The NRC has provided specific flood levels for the river flooding to RS Eng Ltd in terms of NZVD2016, as set out in Table 1 below.

Table 1: Ground and River Flood Levels

Properties	Min approx. Ground	10-year flood	50-year flood	100-year flood
	Levels at site			+CC
3 Te Kemara	4.3m NZVD	4.68m NZVD	4.76m NZVD	4.90m NZVD
15 Te Kemara	4.5m NZVD	4.68m NZVD	4.76m NZVD	4.87m NZVD
19 Te Kemara	4.5m NZVD	-	4.76m NZVD	4.76m NZVD

3.0 Recommendations

3.1 Finished Floor Levels

To comply with the NZ Building Code as a minimum, the floor levels must achieve a minimum vertical freeboard of 500mm above the 50-year flood level. Habitable buildings shall comprise of timber floors supported on timber pile foundations to allow flood storage and flow beneath the building, to avoid adverse effects on the flood hazard and neighbouring properties.

It is common practice to achieve 0.5m freeboard above the 100-year level should the client wish to construct the buildings to take a very low risk approach.

No filling above existing ground level is permitted, unless detailed flood modelling is undertaken to assess effects.

Table 2: Minimum Floor Levels

Properties	Flood Event	Finished Floor Levels
	(NRC Regionwide River Model)	(0.5m freeboard)
		(m NZVD)
3 Te Kemara	50yr ARI	5.3*
	100yr ARI + CC	5.4
15 Te Kemara	50yr ARI	5.3*
	100yr ARI + CC	5.4
19 Te Kemara	50yr ARI	5.3*
	100yr ARI + CC	5.3

^{*}Absolute minimum floor level as per the New Zealand Building Code.

3.2 Construction

- Subfloor spaces shall allow flood waters to pass without obstruction up to the bearers.
- No filling above existing ground level is permitted, unless detailed flood modelling is undertaken to assess effects.

4.0 Natural Hazard

Flood depths across 15 and 19 Te Kemara are nil to upwards of 400mm and at 19 Te Kemara flood depths vary between 300mm-600mm during the 100 year plus climate change storm event. It is expected that velocities are no more than 0.5m/s given that the flooding is expected to be controlled by ponding and backwater effects. Refer to Figure 2 below for determining the degree of the flood hazard.

At 15 and 19 Te Kemara, the natural hazard risk is considered low, with the property having safe access and egress in the event of an emergency. At 3 Te Kemara, safe access and egress is generally available, however may become limited to able body adults for short periods of time during the peak of extreme rainfall/storm events.

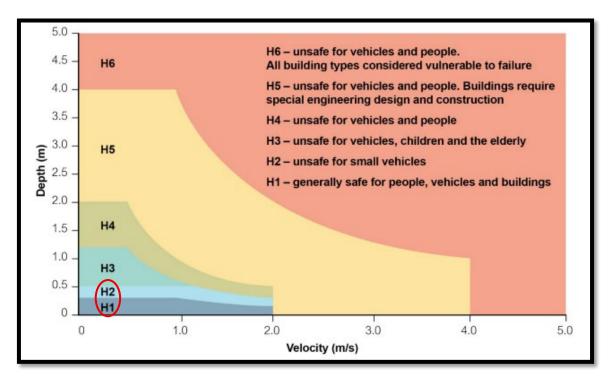


Figure 2: Flood Hazard Curve (Figure 6.7.9 Smith et al 2014)

5.0 Adverse Effects

Provided subfloor spaces allow flood water to pass, and ground levels are not raised, the developments are unlikely to result in adverse effects.

6.0 Limitations

This report has been prepared solely for the benefit of our client. The purpose is to comment on the Flood Hazard in relation to the proposed development. The reliance by other parties on the information or opinions contained therein shall, without our prior review and agreement in writing, do so at their own risk. Recommendations and opinions in this report are based on data obtained as previously detailed.

The minimum flood levels recommended herein are based on requirements of the NZ Building Code and Building Act, and may be subject to inundation in storm events greater than those designed for.

Prepared by:

Sarah Scott Compton

Engineering Technician

NZDE(Civil)

RS Eng Ltd

Rev ewed by

Matthew Jacobson

Director

NZDE(Civil), BE(Hons)(Civil), CPEng, CMEngNZ

Appendix A

NRC Information

Flood Level Report



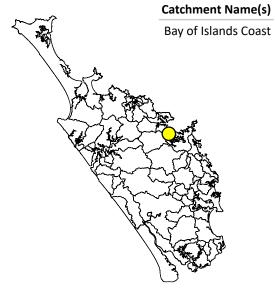


Parcel ID: 5006440

Title: NA13A/723

Appellation: Lot 14 DP 43842

Survey Area: 809 m²



Date Exported: 4/08/2025 Report Reference: 20250804_100531



<u>Useful Flood Information Definitions</u>

Annual Exceedance Probability (AEP) - The probability of a flood event of a given size occurring in any one year, usually expressed as a percentage annual chance.

1% AEP - A flood of this size or larger has a 1 in 100 chance or a 1% probability of occurring in any year.

2% AEP - A flood of this size or larger has a 1 in 50 chance or a 2% probability of occurring in any year.

5% AEP - A flood of this size or larger has a 1 in 20 chance or a 5% probability of occurring in any year.

10% AEP - A flood of this size or larger has a 1 in 10 chance or a 10% probability of occurring in any year.

NZVD2016 - New Zealand Vertical Datum - The reference level used in our flood models to define ground level. **Flood Levels -** Flood levels are used from our modelled flood level rasters. The flood levels are calculated above NZVD 2016 Datum.

Climate Change (CC) - NZCPS (2010) requires that the identification of coastal hazards includes consideration of sea level rise over at least a 100-year planning period. Climate change impacts, such as increased rain intensity, have been included in the flood scenarios. You can read more about the Climate Change forecasts included in each flood model in the technical reports on the NRC website.

Mean high water spring (MHWS) - describes the highest level that spring tides reach, on average.

Coastal Flood Hazard Zones (CFHZ)

Coastal flood hazard zones are derived using a range of data including tide gauge analysis, wind and wave data and models, and use empirical calculations to estimate extreme water levels around the coastline. The calculations include projected sea level rise scenarios based on the latest Ministry for the Environment guidance.

CFHZ 0 Coastal Flood Hazard Zone 0 - area currently susceptible to coastal inundation (flooding by the sea) in a 1-in-100 year storm event

CFHZ 1 Coastal Flood Hazard Zone 1 - an area susceptible to coastal inundation (flooding by the sea) in a 1-in-50 year storm event, taking into account a projected sea-level rise of 0.6m over the next 50 years **CFHZ 2** Coastal Flood Hazard Zone 2 - an area susceptible to coastal inundation (flooding by the sea) in a 1-in-100 year storm event, taking into account a projected sea-level rise of 1.2m over the next 100 years **CFHZ 3** Coastal Flood Hazard Zone 3 - an area susceptible to coastal inundation (flooding by the sea) in a 1-in-100 year storm event, taking into account a projected sea-level rise of 1.5m over the next 100 years (rapid sea level rise scenario)

REGIONWIDE and PRIORITY - RIVER FLOOD HAZARD ZONES (RFHZ)

River flood hazard zones are created to raise awareness of where flood hazard areas are identified, inform decision-making and to support the minimisation of the impacts of flooding in our region. The river flood hazard zones have been created using an assessment of best current available information, engaging national and international experts in the field, using national standards and guidelines and has been peer reviewed. This will provide a good indication of the areas at potential risk of flooding from a regional perspective. However, flood mapping is a complex process which involves some approximation of the natural features and processes associated with flooding.

River Flood Hazard Zone 1 – 10% AEP flood extent: an area with a 10% chance of flooding annually River Flood Hazard Zone 2 – 2% AEP flood extent: an area with a 2% chance of flooding annually River Flood Hazard Zone 3 – 1% AEP flood extent: an area with a 1% chance of flooding annually with the inclusion of potential Climate Change (CC) impact











Maximum	Minimum
4.68 m	4.63 m

10 Year

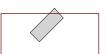
m NZVD

4.48 - 4.68

Parcel

Flood Level Point

Label	Level	
2	0 m	
3	0 m	
4	4.68 m	
5	4.68 m	





50 Year



Maximum	Minimum
4.77 m	4.57 m

50 Year

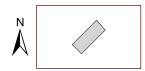
m NZVD

4.57 - 4.77

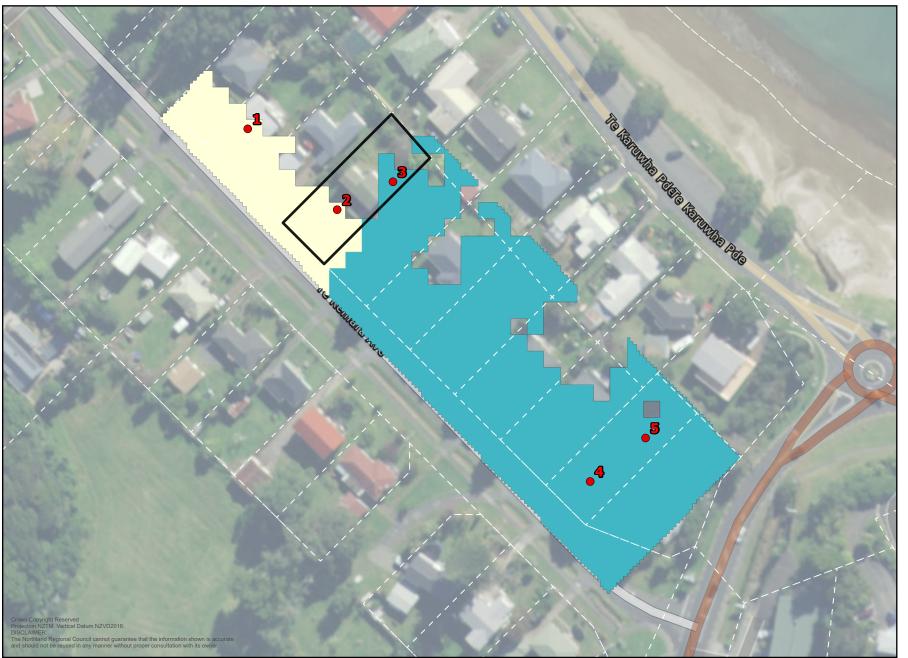
Parcel

Flood Level Point

Label	Level
1	0 m
2	0 m
3	0 m
4	4.76 m
5	4.76 m



100 Year + CC



Maximum	Minimum				
4.9 m	4.66 m				

Max Min flood levels are for raster extent shown on the

100 Year + CC

m NZVD

4.66 - 4.86

4.86 - 5.06

Parcel

Flood Level Point

Label	Level
1	4.76 m
2	4.84 m
3	4.87 m
4	4.9 m
5	4.89 m



Disclaimers

Our modelling disclaimers are linked below:

https://www.nrc.govt.nz/media/ko2dkgxn/coastal-hazard-maps-disclaimer-june-2017.pdf https://www.nrc.govt.nz/media/cqnnw12y/flood-map-disclaimer-2021.pdf

Our regionwide modelling reports are linked below:

https://www.nrc.govt.nz/environment/river-flooding-and-coastal-hazards/river-flooding/river-flood-hazard-maps/regionwide-river-catchments-analysis-technical-reports

ARE YOU FLOOD READY? Know your risk Check what potential flood risks and other hazards that may impact your property. The Natural Hazards Portal is a great place to start. It's a 'one-stop-shop' of information related to natural hazards within our region: www.nrc.govt.nz/environment/natural-hazards-portal The Environmental Data Hub provides river level and flow data, as well as warning levels, rainfall data, water quality, and more: www.nrc.govt.nz/environment/environmental-data/environmental-datahub Have a plan Make sure you have an evacuation plan, emergency kit and important phone numbers ready. Check out: https://getready.govt.nz/en/prepared/ for tips on how to get ready. Stay up to date In a civil defence emergency situation, follow the updates on the Northland CDEM Group's Facebook page: www.facebook.com/civildefencenorthland Or follow updates from the embedded feed on the regional council website: www.nrc.govt.nz/civildefence In an emergency





Remember, if life is threatened dial 111 to contact emergency services.





File: 19780

21 August 2025

Issue: 1

STORMWATER MANAGEMENT

3, 15 and 19 Te Kemara Avenue, Waitangi

(Lots 12, 14 & 20 DP 43841)

1.0 Introduction

RS Eng Ltd (RS Eng) has been engaged by Advance Build to detail and design stormwater management systems at 3, 15 and 19 Te Kemara Avenue, Waitangi for residential construction.

The client proposes to construct two dwellings on each property being single-storey as well as a shared driveway and parking area proposed.

2.0 Stormwater Attenuation Assessment

The properties are located within the Commercial Zone. As per section 7.7.5.1.11 of the District Plan, "The disposal of collected stormwater from the roof of all new buildings and new impervious surfaces provided that the activity is within an existing consented urban stormwater management plan or discharge consent." Given that there is no stormwater network available for these properties to discharge to, the proposals fall under Restricted Discretionary Activity. As a result, attenuation of the stormwater runoff is proposed. This minimises any potential adverse effects on downstream properties and council assets.

The Far North District Council (WDC) Engineering Standards (ES) requires attenuation of stormwater runoff from any increase in impervious areas so that post-development peak flows are less than 80% of pre-development. The FNDC ES specifies that the flows be attenuated for the 20% and 1% Annual Exceedance Probability (AEP) events.

It is proposed for each property to direct stormwater runoff from the roof of the new dwellings into a rainwater storage tank with restricted outlets which reduce the peak flows to predevelopment levels. The properties have contained existing impervious surfaces being dwellings and driveways (that have been or are proposed to be removed). As the increase in newly formed impervious surfaces approximately make up the proposed roof areas only, attenuation is not considered to be required for the proposed driveways and parking areas. A simplified design which is consistent for the three properties has been undertaken.



The pre-development and post-development runoff flows were modelled using HydroCAD. The United States Department of Agriculture Technical Release 55 (TR55) Type 1A method was adopted for calculating the run-off flow, using rainfall depths from HIRDS 4 (High Intensity Rainfall Design System, NIWA) including an additional 20% rainfall depth to account for climate change as required by WDC ES. The subsoils have been assessed as sands, designated as Group B soils with good grass cover. Table 1 includes a summary of the stormwater attenuation modelling.

Table 1: Stormwater Attenuation Design Summary for Each Property.

	Pre-deve	lopment	Post-development				
Permeable Area (m²)							
Grassed	19	90	<u>-</u>				
Impervious Area (m²)							
Roof Area	-	-	1	90			
Peak flow I/s	20% AEP	1% AEP	20% AEP	1% AEP			
			+20%	+20%			
From surfaces	0.67 1.97		2.08	3.76			
80% (design flows reqd.)	0.54 1.58						
Total attenuated flows			0.54	1.54			
Storage Required			7.7m ³	13.4m³			
	Attenuation Tank Summary						
Tank		25,000L Pro	omax or similar				
Tank Diameter		3	3.6m				
	Diam	neter	Depth from Overflow				
Primary Orifice	17r	nm	1.4m				
Secondary Orifice	24r	nm	0.5m				

3.0 Disposal

To suitably manage and dispose of stormwater from 15 and 19 Te Kemara, soakage pits are proposed designed in accordance with the Building Code. 3 Te Kemara is proposed discharge to an existing drain.

Two percolation tests were completed across 3 and 15 Te Kemara Avenue. The tests achieved minimum soakage rates of 1200mm/hr, in accordance with FNDC ES a factor of safety of 4 has been adopted to get a design soakage rate of 300mm/hr, which has been used in the following design.

The two new dwellings on each property are proposed to have roof and driveway areas of 190m² and 180m², respectively.

The design demonstrates a 3m x 3m by 1.0m deep soakage pit proposed to suitably soakage away stormwater runoff from the proposed impervious surfaces up to the design 10%+20%AEP event for the rainfall intensity of 1 hour duration.

Table 2: Stormwater Soakage Pit Summary 15 and 19 Te Kemara.

Storage Pit Summary							
Material	65 – 40 Washed Graded Chip						
	Length Width Depth						
Pit Dimensions	3m	3m	1.0m				

4.0 Limitations

This report has been prepared solely for the benefit of our client. The purpose is to design stormwater management systems in relation to the proposed development. The reliance by other parties on the information or opinions contained therein shall, without our prior review and agreement in writing, do so at their own risk. Recommendations and opinions in this report are based on data obtained as previously detailed.

Prepared by:

Sarah Scott Compton

Senior Technician

NZDE(Civil)

Reviewed by:

Matthew Jacobson

Director

NZDE(Civil), BE(Hons)(Civil), CPEng, CMEngNZ

Appendix A

Drawings

19 Te Kemara Road, Paihia 15 Te Kemara Road, Paihia 3 Te Kemara Road, Paihia

NOTES:

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LEGEND

Proposed Dwelling
Proposed Driveway
Proposed Deck

Contour Interval: 0.5m

Vertical Datum: NZVD2016

Survey Data Source: LiDAR (2018)

12.5 25 PLAN 1:1250



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

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PROPOSED DWELLINGS SITE PLAN STORMWATER MANAGEMENT

Client						Scale		Rev No.
ADVANCE BUILD						1:750		Α
						Original		
Location								Sheet No.
3, 15, 19 TE KEMARA ROAD	01/08/2025	Α	Original Iss	ue			А3	
PAIHIA	Date	Rev	Notes			Job No.		C01
PAINIA	Drawn by: L	.MC		Reviewed by: SSC	Approved by: MJ	1	L9780	



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LEGEND

Hand Auger Location
Cone Penetration Test Location
Proposed Dwelling
Proposed Driveway
Proposed Deck

Contour Interval: 0.5m

Vertical Datum: NZVD2016

Survey Data Source: LiDAR (2018)

0 2.5 5 PLAN 1:250



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PROPOSED DWELLINGS SITE PLAN STORMWATER

Client						Scale		Rev No.
ADVANCE BUILD							1:250	Α
1						Original		Ch + N -
Location 3 TE KEMARA ROAD	01/08/2025	А	Original Iss	ue			A3	Sheet No.
	Date	Rev	Notes			Job No.		CO2
PAIHIA	Drawn by: L	MC		Reviewed by: SSC	Approved by: MJ	1	19780	CUZ



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LEGEND

Hand Auger Location
Cone Penetration Test Location
Proposed Dwelling

Proposed Dwelling
Proposed Driveway
Proposed Deck

Contour Interval: 0.5m

Vertical Datum: NZVD2016

Survey Data Source: LiDAR (2018)

0 2.5 5 PLAN 1:250



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PROPOSED DWELLINGS
SITE PLAN
STORMWATER

Client						Scale		Rev No.
ADVANCE BUILD							1:250	Α
Location						Original		Sheet No.
	01/08/2025	А	Original Is:	sue		1	A3	Sheet No.
	Date	Rev	Notes			Job No.		C03
PAIHIA	Drawn by: L	MC	•	Reviewed by: SSC	Approved by: MJ	1	19780	605



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LEGEND

Hand Auger Location
Cone Penetration Test Location
Proposed Dwelling
Proposed Driveway

Proposed Driveway
Proposed Deck

Contour Interval: 0.5m

Vertical Datum: NZVD2016

Survey Data Source: LiDAR (2018)

0 2.5 5 PLAN 1:250



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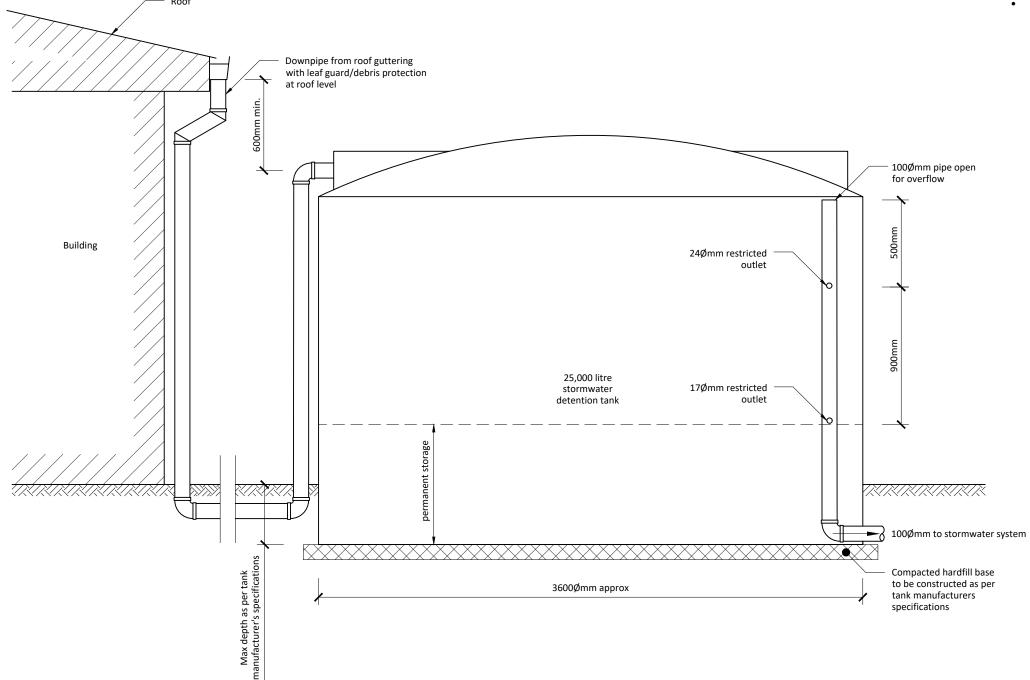
If any part of these documents are unclear, please contact RS Eng Ltd.

PROPOSED DWELLINGS
SITE PLAN
STORMWATER

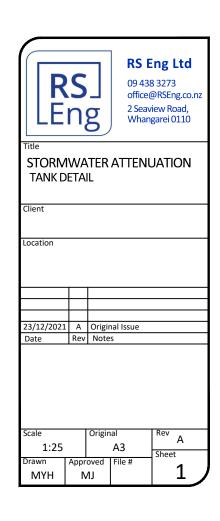
Client						Scale		Rev No.
ADVANCE BUILD							1:250	Α
	4					Original		
Location	/ /					1	A3	Sheet No.
19 TE KEMARA ROAD	01/08/2025	Α	Original Iss	ue				
PAIHIA	Date	Rev	Notes			Job No.		C04
FAIIIA	Drawn by: L	MC		Reviewed by: SSC	Approved by: MJ		19780	

Appendix B

Stormwater Attenuation Design



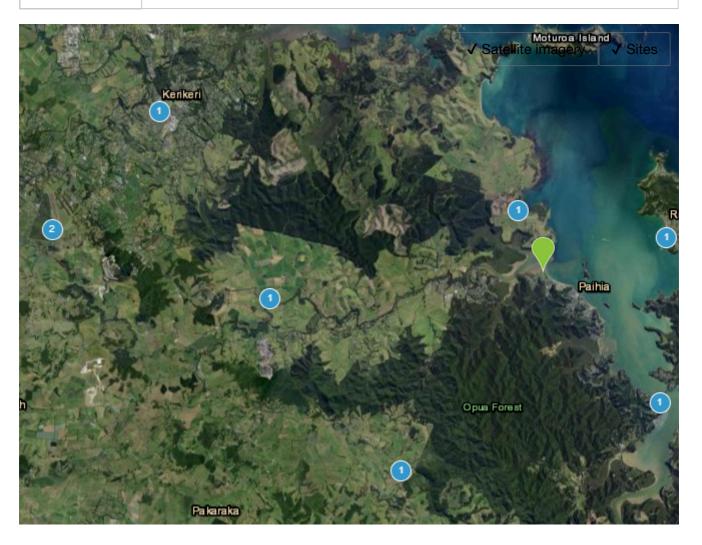
- All services should be located on-site prior to commencement of works.
- All works to comply with all relevant local authority by-laws and council regulations where applicable.
- Contractors to confirm all dimensions on site prior to commencing any work.
- Do not scale off drawings.
- These drawings are to be read in conjunction with specifications plans take precedence.
- If any part of these documents are unclear, please contact RSEng Ltd.
- This plan is copyright to RSEng Ltd and should not be reproduced without prior permission.



Location

Address search

Enter your address and press enter to search



Site Information

To generate a set of results, either click on an existing data point, or a new location and enter a site name, then press the Generate Report button.

Latitude	-35.2756835399634
Longitude	174.07953655971198
Site Name	Custom Location
Site Name	Gustom Education

- Depth Duration Frequency
- Intensity Duration Frequency

Generate Report

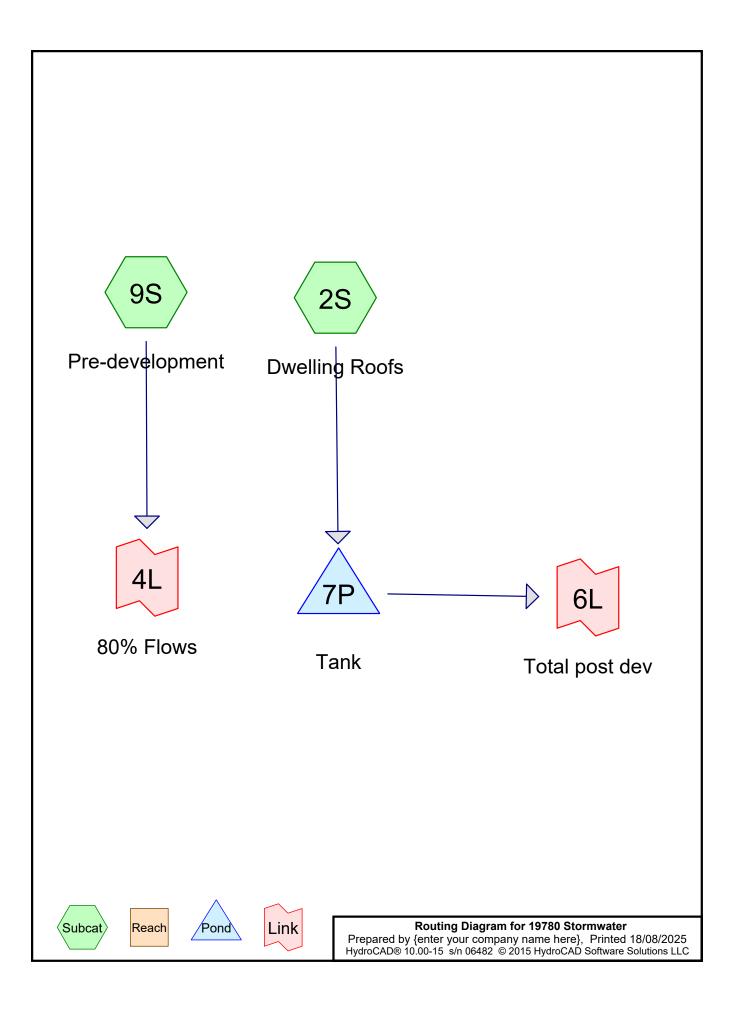
Results

Spreadsheet Download 🕹

Historical Data RCP2.6 Scenario RCP4.5 Scenario Site Details RCP6.0 Scenario RCP8.5 Scenario Rainfall depths (mm) :: Historical Data ARI **AEP** 10m 20m 30m 1h 2h 6h 12h 24h 48h 72h 96h 120h 0.633 37.7 60.3 1.58 11.0 15.7 19.3 27.2 77.7 96.3 114 123 128 132 2 29.9 66.2 0.500 12.1 17.2 21.2 41.4 85.4 106 126 135 141 145 5 0.200 15.6 22.4 27.5 38.9 54.1 86.7 112 139 165 178 186 191 26.2 32.2 10 0.100 18.3 45.6 63.4 102 132 164 195 210 220 225 30.0 37.0 72.9 20 0.050 20.9 52.4 117 152 189 225 243 254 261 30 0.033 22.5 32.3 39.8 56.4 78.6 127 204 263 275 282 164 243 40 0.025 23.6 33.9 41.8 59.3 82.6 133 173 215 256 277 290 298 50 0.020 24.5 35.2 43.4 61.5 85.8 138 179 224 266 288 301 310 60 0.017 25.2 36.2 44.7 63.4 88.4 143 185 231 275 297 311 319 80 0.013 26.3 37.9 46.7 66.2 92.4 149 194 242 288 312 326 335 100 0.010 27.2 39.1 48.3 68.5 95.6 154 200 250 298 323 338 347 250 0.004 54.5 175 228 285 368 385 396 30.7 44.1 77.4 108 340 Depth standard error (mm) :: Historical Data ARI **AEP** 10m 20m 30m 1h 2h 6h 12h 24h 48h 72h 96h 120h 1.58 0.633 1.3 1.6 1.9 2.5 3.6 6.5 9.8 15 18 21 22 23 2 0.500 1.4 1.8 2.0 2.7 4.0 7.2 11 16 20 23 25 25 5 0.200 2.0 2.6 3.0 3.9 5.7 9.8 15 22 28 32 34 34

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
10	0.100	2.6	3.5	4.1	5.1	7.5	13	19	26	33	38	41	41
20	0.050	3.3	4.5	5.5	6.8	9.9	16	24	31	38	45	49	49
30	0.033	3.8	5.3	6.5	8.0	12	19	27	34	42	50	54	53
40	0.025	4.2	5.9	7.3	9.1	13	21	30	37	45	53	58	57
50	0.020	4.6	6.4	8.1	9.9	14	23	33	39	47	56	61	60
60	0.017	4.9	6.8	8.7	11	15	25	35	41	49	58	63	63
80	0.013	5.4	7.6	9.8	12	17	28	39	43	52	62	68	67
100	0.010	5.9	8.2	11	13	18	30	43	46	55	66	71	70
3.0 ©201 250 erms and	0.004	8.0	11	16	19	26	44	60	57	67	81	88	87

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Page 1

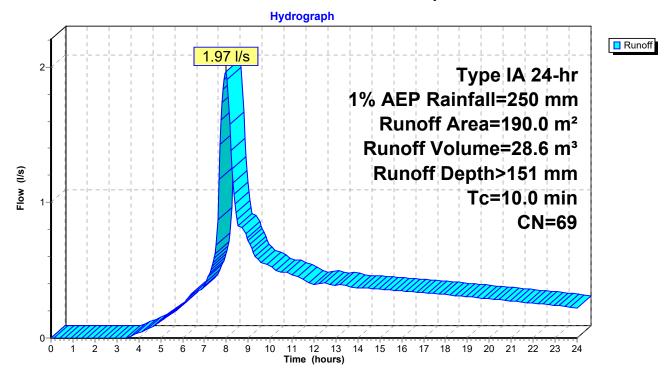
Summary for Subcatchment 9S: Pre-development

Runoff = 1.97 l/s @ 8.00 hrs, Volume= 28.6 m³, Depth> 151 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 Rainfall=250 mm

_	Α	rea (m²)	CN	De	escription							
		190.0	69	50	0-75% Grass cover, Fair, HSG B							
		190.0		10	00.00% Pervious Area							
_	Tc (min)	Length (meters)	Slop (m/r		Velocity (m/sec)	Capacity (m³/s)	Description					
_	10.0		•			·	Direct Entry,					

Subcatchment 9S: Pre-development



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Page 2

Summary for Link 4L: 80% Flows

190.0 m², 0.00% Impervious, Inflow Depth > 151 mm for 1% AEP event Inflow Area =

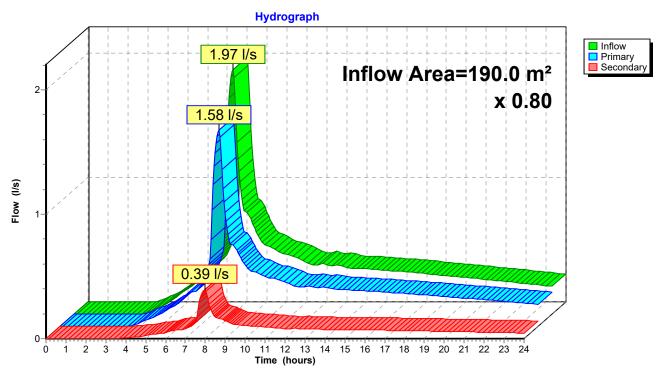
8.00 hrs, Volume= Inflow 1.97 l/s @ 28.6 m³

1.58 l/s @ 8.00 hrs, Volume= 22.9 m³, Atten= 20%, Lag= 0.0 min Primary

8.00 hrs, Volume= Secondary = 0.39 l/s @ 5.7 m³

Primary outflow = Inflow x 0.80, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 4L: 80% Flows



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Page 3

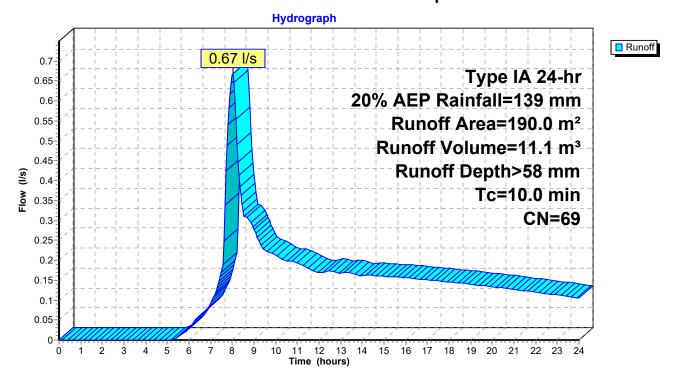
Summary for Subcatchment 9S: Pre-development

Runoff = 0.67 l/s @ 8.03 hrs, Volume= 11.1 m³, Depth> 58 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 20% AEP Rainfall=139 mm

_	Α	rea (m²)	CN	De	escription							
		190.0	69	50	0-75% Grass cover, Fair, HSG B							
		190.0		10	00.00% Pervious Area							
_	Tc (min)	Length (meters)	Slop (m/r		Velocity (m/sec)	Capacity (m³/s)	Description					
_	10.0		•			·	Direct Entry,					

Subcatchment 9S: Pre-development



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Page 4

Summary for Link 4L: 80% Flows

Inflow Area = 190.0 m², 0.00% Impervious, Inflow Depth > 58 mm for 20% AEP event

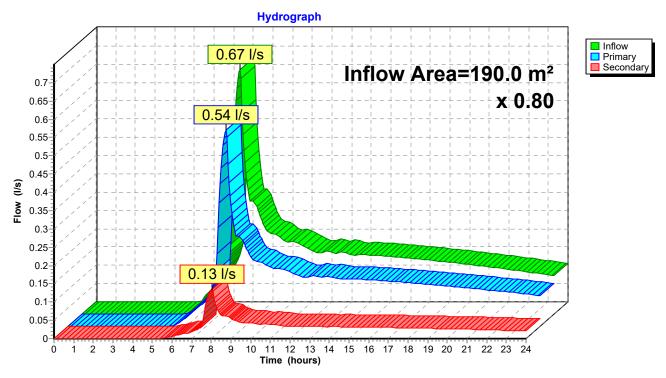
Inflow = 0.67 l/s @ 8.03 hrs, Volume= 11.1 m^3

Primary = 0.54 l/s @ 8.03 hrs, Volume= 8.9 m³, Atten= 20%, Lag= 0.0 min

Secondary = 0.13 l/s @ 8.03 hrs, Volume= 2.2 m^3

Primary outflow = Inflow x 0.80, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 4L: 80% Flows



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Page 1

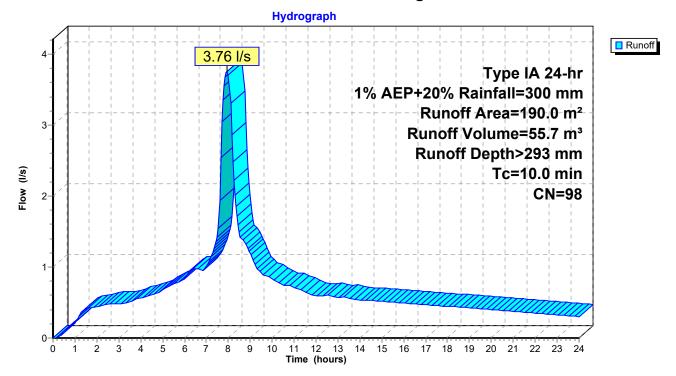
Summary for Subcatchment 2S: Dwelling Roofs

Runoff = 3.76 l/s @ 7.94 hrs, Volume= 55.7 m³, Depth> 293 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% Rainfall=300 mm

_	Α	rea (m²)	CN	Description		
*		190.0	98	House roof		
		190.0		100.00% Im	npervious Ar	rea
	Tc	Length	Slop	e Velocity	Capacity	Description
_	(min)	(meters)	(m/n	n) (m/sec)	(m³/s)	
	10.0					Direct Entry,

Subcatchment 2S: Dwelling Roofs



19780 Stormwater

Prepared by {enter your company name here}

Printed 18/08/2025

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Page 2

Summary for Pond 7P: Tank

Inflow Area = 190.0 m²,100.00% Impervious, Inflow Depth > 293 mm for 1% AEP+20% event

Inflow = 3.76 l/s @ 7.94 hrs, Volume= 55.7 m^3

Outflow = 1.54 l/s @ 8.48 hrs, Volume= 50.6 m³, Atten= 59%, Lag= 32.5 min

Primary = 1.54 l/s @ 8.48 hrs, Volume= 50.6 m^3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs Peak Elev= 1.391 m @ 8.48 hrs Surf.Area= 9.6 m² Storage= 13.4 m³

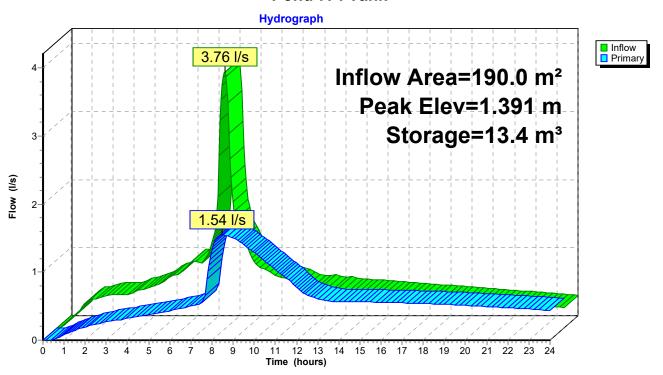
Plug-Flow detention time= 178.8 min calculated for 50.4 m³ (91% of inflow) Center-of-Mass det. time= 110.9 min (755.1 - 644.2)

Volume	Invert	Avail.Storage Storage Description
#1	0.000 m	24.1 m ³ 3.50 mD x 2.50 mH Vertical Cone/Cylinder
Device	Routing	Invert Outlet Devices
#1	Primary	0.000 m 17 mm Vert. Orifice/Grate C= 0.600
#2	Primary	0.900 m 24 mm Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.54 l/s @ 8.48 hrs HW=1.391 m (Free Discharge) 1=Orifice/Grate (Orifice Controls 0.71 l/s @ 3.12 m/s)

-2=Orifice/Grate (Orifice Controls 0.83 l/s @ 1.84 m/s)

Pond 7P: Tank



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Page 3

Summary for Link 6L: Total post dev

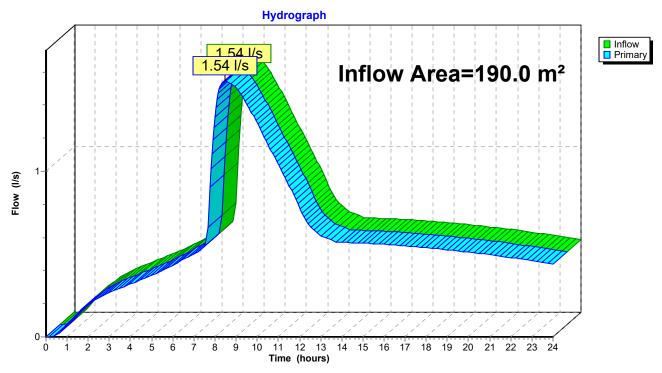
Inflow Area = 190.0 m²,100.00% Impervious, Inflow Depth > 266 mm for 1% AEP+20% event

Inflow = 1.54 l/s @ 8.48 hrs, Volume= 50.6 m^3

Primary = 1.54 l/s @ 8.48 hrs, Volume= 50.6 m³, Atten= 0%, Lag= 0.0 min

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

Link 6L: Total post dev



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Page 4

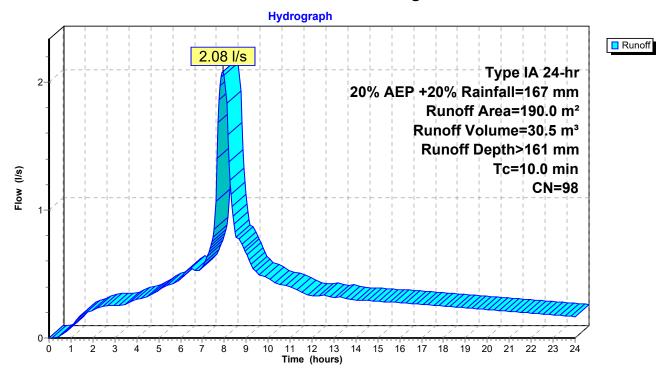
Summary for Subcatchment 2S: Dwelling Roofs

Runoff = 2.08 l/s @ 7.94 hrs, Volume= 30.5 m³, Depth> 161 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 20% AEP +20% Rainfall=167 mm

	Aı	rea (m²)	CN I	Description		
*		190.0	98 I	House roof		
		190.0		100.00% lm	pervious Ar	rea
	Tc	Length		Velocity		Description
_	(min)	(meters)	(m/m) (m/sec)	(m³/s)	
	10.0					Direct Entry,

Subcatchment 2S: Dwelling Roofs



19780 Stormwater

Prepared by {enter your company name here}

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Page 5

Summary for Pond 7P: Tank

Inflow Area = 190.0 m²,100.00% Impervious, Inflow Depth > 161 mm for 20% AEP +20% event

Inflow = 2.08 l/s @ 7.94 hrs, Volume= 30.5 m^3

Outflow = 0.54 l/s @ 9.35 hrs, Volume= 28.9 m³, Atten= 74%, Lag= 84.8 min

Primary = 0.54 l/s @ 9.35 hrs, Volume= 28.9 m^3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs Peak Elev= 0.800 m @ 9.35 hrs Surf.Area= 9.6 m² Storage= 7.7 m³

Plug-Flow detention time= 174.0 min calculated for 28.9 m³ (95% of inflow)

Center-of-Mass det. time= 134.9 min (786.6 - 651.7)

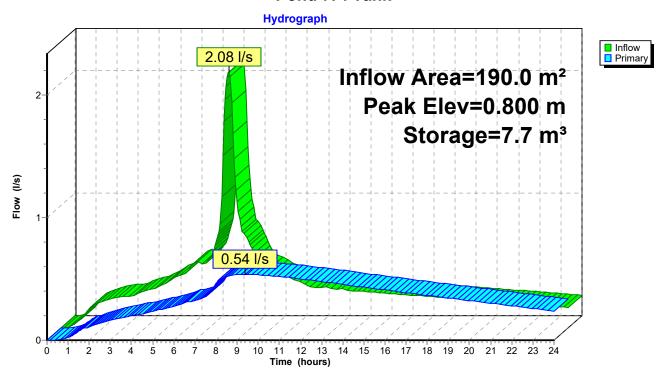
Volume	Invert	Avail.Storage Storage Description
#1	0.000 m	24.1 m ³ 3.50 mD x 2.50 mH Vertical Cone/Cylinder
Device	Routing	Invert Outlet Devices
#1	Primary	0.000 m 17 mm Vert. Orifice/Grate C= 0.600
#2	Primary	0.900 m 24 mm Vert Orifice/Grate C= 0.600

Primary OutFlow Max=0.54 l/s @ 9.35 hrs HW=0.800 m (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.54 l/s @ 2.36 m/s)

-2=Orifice/Grate (Controls 0.00 l/s)

Pond 7P: Tank



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Page 6

Summary for Link 6L: Total post dev

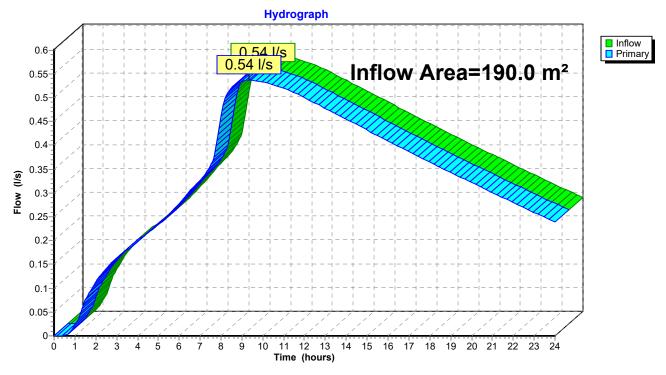
190.0 m²,100.00% Impervious, Inflow Depth > 152 mm for 20% AEP +20% event Inflow Area =

0.54 l/s @ 0.54 l/s @ Inflow 9.35 hrs, Volume= 28.9 m³

9.35 hrs, Volume= 28.9 m³, Atten= 0%, Lag= 0.0 min Primary

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

Link 6L: Total post dev



Appendix C

Stormwater Soakage Pit Design



PROJECT CLIENT LOCATION

Dwelling Advance Build 3 Te kemara Page No. 1
Job No. 19780
Calculated by: SS
Checked by: MJ
Date 31/07/2025

Falling Head Percolation Test

Test ID. 1 Pre-test groundwater level 0 Test No. 1 Elevation 4.4

 $\begin{array}{cccc} \text{Hole Dia.} & 0.075 & \text{m} \\ \text{Hole Depth} & 0.25 & \text{m} \\ \text{Duration} & 5 & \text{min} \end{array}$

	Interval		Water	gradient
Test Duration (Min)	(min)	Water Depth (mbgl)	Drop (m)	(m/min)
0	0	0		
0.3	0.33	0.05	0.05	0.152
0.7	0.33	0.07	0.02	0.061
1	0.34	0.09	0.02	0.059
1.3	0.3	0.11	0.02	0.067
2	0.7	0.14	0.03	0.043
3	1	0.17	0.03	0.030
4	1	0.19	0.02	0.020
5	1	0.24	0.05	0.050

Minimum gradient 0.02

Soakage Rate

Soakage Rate 0.02 m/min 1200 mm/hr

FoS 4 (FNDC ES)

Design Soakage Rate 300 mm/hr



PROJECT Dwelling
CLIENT Advance Build
LOCATION 15 Te kemara

Page No. 2
Job No. 19780
Calculated by: SS
Checked by: MJ
Date 31/07/2025

Falling Head Percolation Test

Test ID. 2 Pre-test groundwater level 0 Test No. 2 Elevation 4.5

 $\begin{array}{cccc} \text{Hole Dia.} & & 0.1 & \text{m} \\ \text{Hole Depth} & & 0.5 & \text{m} \\ \text{Duration} & & 8 & \text{min} \end{array}$

	Interval		Water	gradient
Test Duration (Min)	(min)	Water Depth (mbgl)		(m/min)
0	0	0		
1	1	0.17	0.17	0.170
2	1	0.24	0.07	0.070
3	1	0.28	0.04	0.040
4	1	0.32	0.04	0.040
5	1	0.38	0.06	0.060
6	1	0.4	0.02	0.020
7	1	0.44	0.04	0.040
8	1	0.46	0.02	0.020

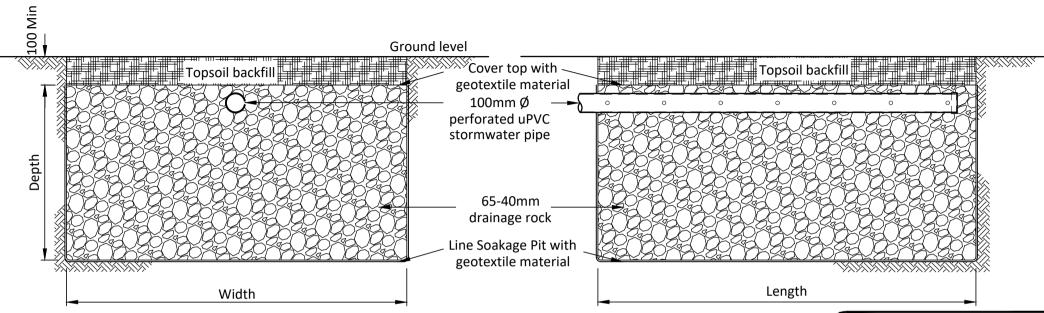
Minimum gradient 0.02

Soakage Rate

Soakage Rate 0.02 m/min 1200 mm/hr

FoS 4 (FNDC ES)

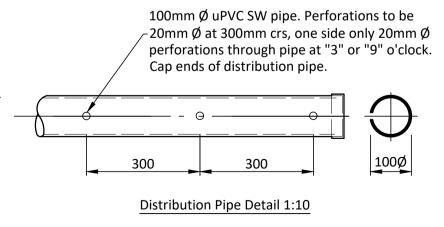
Design Soakage Rate 300 mm/hr



Stormwater Soakage Pit Detail 1:20

Notes:

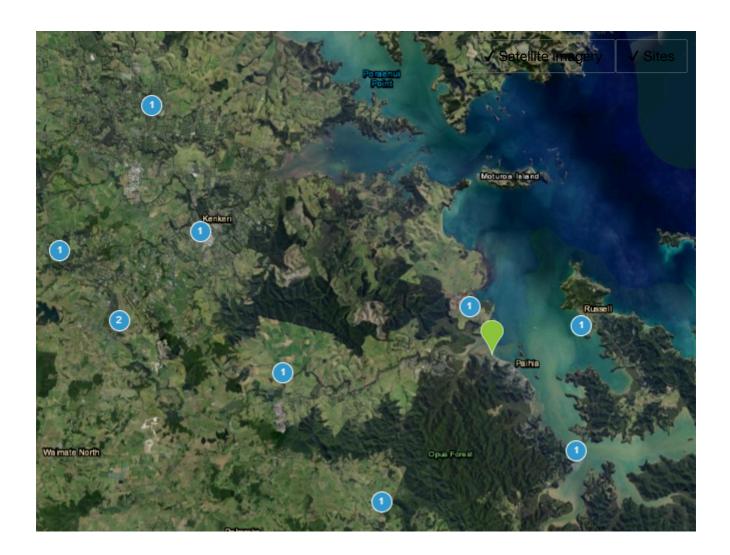
- All dimensions are in mm
- Geotextile material to comply with AS 3706.1 (140g/m² and 0.48mm min thickness)
- Distribution pipe to be laid level and provide 50mm cover to filter fabric
- 65-40 drainage rock to be free from all fines
- Any smeared and/or compacted surfaces of trench to be removed carefully
- This plan is copyright to RS Eng Ltd and should not be reproduced without prior permission.





Location

Address search 15 te kemara



Site Information

To generate a set of results, either click on an existing data point, or a new location and enter a site name, then press the Generate Report button.

Latitude	-35.27693536264775
Longitude	174.08114939775456
Site Name	Custom Location

Site Id

Output Table Format

- O Depth Duration Frequency
- Intensity Duration Frequency

Generate Report

Results

Spreadsheet Download 🕹

Site De	tails	Histo	orical Da	ta	RCP2.	6 Scen	ario	RCF	94.5 Sc	enario	RC	P6.0 S	cenario
RCP8.5	5 Scenai	rio											
Rainfa	all inter	nsitie	s (mm/	hr) :: l	Histori	ical D	ata						
ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	66.1	47.2	38.7	27.3	18.9	10.1	6.49	4.02	2.38	1.71	1.34	1.10
2	0.500	72.5	51.8	42.4	29.9	20.7	11.1	7.13	4.43	2.62	1.89	1.47	1.21
5	0.200	94.0	67.3	55.2	39.0	27.1	14.5	9.35	5.81	3.45	2.48	1.94	1.60
10	0.100	110	78.6	64.5	45.6	31.7	17.0	11.0	6.84	4.06	2.93	2.29	1.88
20	0.050	126	90.2	74.1	52.4	36.5	19.6	12.7	7.90	4.70	3.39	2.65	2.18
30	0.033	135	97.1	79.7	56.5	39.4	21.1	13.7	8.53	5.08	3.66	2.87	2.36
40	0.025	142	102	83.8	59.4	41.4	22.2	14.4	8.98	5.35	3.86	3.02	2.49
50	0.020	147	106	86.9	61.6	43.0	23.1	15.0	9.34	5.56	4.01	3.15	2.59
60	0.017	151	109	89.5	63.4	44.3	23.8	15.4	9.63	5.74	4.14	3.24	2.67
80	0.013	158	114	93.5	66.3	46.3	24.9	16.2	10.1	6.01	4.34	3.40	2.80
100	0.010	163	118	96.6	68.6	47.9	25.8	16.7	10.4	6.23	4.49	3.52	2.90
250	0.004	184	133	109	77.6	54.2	29.2	19.0	11.9	7.10	5.13	4.02	3.31
Intens	sity sta	ndard	d error	(mm/l	nr) :: H	listori	cal D	ata					
ARI	AEP	10m	1 20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
1.58	0.633	8.3	4.9	3.8	2.6	1.7	1.1	0.79	0.61	0.38	0.29	0.23	0.19
2	0.500	9.1	5.3	4.1	2.8	1.9	1.2	0.87	0.68	0.42	0.32	0.26	0.21
5	0.200	13	7.8	5.9	4.1	2.7	1.7	1.2	0.93	0.57	0.43	0.35	0.28

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	96h	120h
10	0.100	16	10	7.9	5.3	3.6	2.2	1.6	1.1	0.69	0.51	0.42	0.34
20	0.050	21	14	10	7.0	4.7	2.9	2.0	1.3	0.81	0.61	0.49	0.40
30	0.033	24	16	12	8.3	5.6	3.4	2.4	1.5	0.89	0.66	0.54	0.44
40	0.025	27	18	14	9.3	6.3	3.8	2.6	1.6	0.95	0.71	0.58	0.46
50	0.020	29	19	15	10	6.9	4.2	2.9	1.7	0.99	0.75	0.61	0.49
60	0.017	31	21	16	11	7.4	4.5	3.1	1.7	1.0	0.78	0.64	0.51
80	0.013	34	23	18	12	8.2	5.0	3.5	1.9	1.1	0.83	0.68	0.54
100	0.010	37	25	19	13	9.0	5.5	3.8	2.0	1.2	0.88	0.72	0.57
250	7 NIWA a 0.004 Condition	51	35	27	19	13	8.0	5.5 cy)	2.4	1.4	1.1	0.89	0.69

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File: 19780

21 August 2025

Issue: 1

COASTAL EROSION HAZARD ASSESSMENT

3, 15 and 19 Te Kemara Avenue, Waitangi

(Lots 12, 14 & 20 DP 43841)

1.0 Introduction

RS Eng Ltd (RS Eng) has been engaged by Advance Build assess the coastal erosion hazard at 3, 15 and 19 Te Kemara Avenue, Waitangi for residential construction.

The client proposes to construct two dwellings on each property being single-storey made up of timber framing on timber piled foundations.

2.0 Coastal Erosion Hazard

These properties are situated on the northern side of Te Kemara, being located beyond one row of properties which face the beachfront of Te Ti Bay. The buildings are to be located on near level topography.

The Northland Regional Council coastal hazard zones are based on the Tonkin & Taylor October 2020 Report "Coastal Erosion Hazard Zone Assessment for Selected Northland Sites" where:

- CEHZ1 (orange) is a zone likely to be subject to coastal erosion within a 50 year period.
- CEHZ2 (yellow) is a zone potential to be subject to erosion within a 100 year period.
- CEHZ3 (green) is a zone potential to be subject to erosion within a 100 year period including rapid sea level rise scenario.





Figure 2: Coastal Erosion Mapping NRC (arrows of approx. sites)

Table 1: Tonkin & Taylor October 2020 Report CEHZ summary

	Timeframe	Probability of exceedance	RCP scenario	Sea level rise ¹
CEHZ1	2080	66% (likely)	8.5M	0.33
CEHZ2	2130	5% (potential)	8.5M	0.85
CEHZ3	2130	5% (potential)	8.5H+	1.17

The Tonkin and Taylor Coastal Erosion Report which includes this site "Te Ti Bay (Waitangi)" shows the property within cell E. Table 19-1 shows that T+T assessed this cell to have a long term erosion rate of nil from historic aerial images, see attached. Aerial imagery from 1951, 1971 and 1981 has been reviewed, see 1951 imagery below. Reviewing these images, it was noted that the grassed reserve north of Te Karuwha Parade has remained unchanged since 1971 imagery and since 1951 imagery to present day with exception to further north of Te Karuwha Parade where erosion protection measures have been put in place.



Figure 3: 1951 Imagery (Source:Retrolens) (arrows of approx. sites)

To demine the Coastal Erosion Hazard, Tonkin and Taylor assessed a range of probabilities. The Tonkin and Taylor CEHZ2 erosion width is based on the 5% probability of exceedance which is considered suitable for a hazard zone, however, not when considering if a property is subject to a natural hazard. Section 71-72 of the Building Act and Section 106 of the Resource Management Act refers to the land as being likely subject to a Natural Hazard. To assess if the property is "likely" to be subject to a natural hazard, RS Eng have reviewed the 2130 coastal erosion width for a 66% probability of exceedance. Table 199-4 (attached) shows the projections and probability for 100 years of Coastal Erosion for each cell. For a period to 2130, the likely (66% probability) scenario RCP8.5 gives a coastal erosion width of 67m. Refer Appendix A, the likely 100yr coastal erosion width has been indicated.

Table 2: Summary of Assessed Projected Coastal Erosion

Likely Erosion Projected (yr)	Erosion Width Projection (m)
2130	67

Given the lack of coastal erosion occurring in over the last 70 years, the properties seaward of the properties in question along Te Karuwha Parade, the adjoining state highway, RS Eng considers the proposed building works are not likely to be subject to the natural hazard of coastal erosion over a 100yr period.

3.0 Conclusion

RS Eng Ltd also concludes that subject to the recommendations of this report, in terms of Section 71-72 of the Building Act 2004;

- (a) the building work to which an application for a building consent relates will not accelerate, worsen, or result in coastal erosion on the land on which the building work is to be carried out or any other property; and
- (b) the land is neither subject to nor likely to be subject to coastal erosion.

4.0 Limitations

This report has been prepared solely for the benefit of our client. The purpose is to comment on the Coastal Erosion Hazard in relation to the proposed development. The reliance by other parties on the information or opinions contained therein shall, without our prior review and agreement in writing, do so at their own risk. Recommendations and opinions in this report are based on data obtained as previously detailed.

Prepared by:

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Reviewed by:

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Director

NZDE(Civil), BE(Hons)(Civil), CPEng, CMEngNZ

Appendix A

Drawings

19 Te Kemara Road, Paihia Existing Assessed Likely 100yr 15 Te Kemara Road, Paihia 3 Te Kemara Road, Paihia FOR CONSENT

NOTES:

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LEGEND

Coastal Erosion Zone (100 years)



Contour Interval: 0.5m

Vertical Datum: NZVD2016

Survey Data Source: LiDAR (2018)

0 12.5 25 PLAN 1:1250

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

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PROPOSED DWELLINGS
SITE PLAN
COASTAL EROSION

Client ADVANCE BUILD						Scale 1:750		Rev No.
Location 3, 15, 19 TE KEMARA ROAD	01/08/2025	А	Original Iss	ue		Original	А3	Sheet No.
PAIHIA	Date	Rev	Notes			Job No.		C01
FAILIA	Drawn by: L	.MC		Reviewed by: SSC	Approved by: MJ	1	L9780	COI

Table 199-4 Coastal Erosion Hazard Zone Widths Projected for 2130

Site											19	. Waitang	i								
Cell			1	9A			1	.9B				19C				19D			1	L9E	
RCP	scenario	2.6	4.6	8.5	8.5+	2.6	4.6	8.5	8.5+	2.6	4.6	8.5	8.5+	2.6	4.6	8.5	8.5+	2.6	4.6	8.5	8.5+
	Min	-3	-3	-4	-4	-7	-7	-8	-9	-13	-20	-38	-52	-1	-7	-26	-40	-15	-15	-16	-17
	99%	-3	-4	-5	-6	-8	-9	-10	-10	-18	-25	-45	-60	-6	-13	-34	-49	-17	-18	-19	-19
	95%	-4	-5	-6	-7	-9	-10	-11	-12	-21	-29	-50	-66	-9	-17	-39	-55	-19	-19	-21	-21
	90%	-5	-5	-7	-8	-10	-10	-12	-13	-23	-31	-54	-71	-12	-20	-43	-60	-20	-21	-22	-23
a	80%	-5	-6	-8	-9	-10	-11	-13	-14	-26	-34	-60	-78	-15	-23	-49	-67	-21	-22	-24	-24
Probability of CEHZ (m) Exceedance	70%	-6	-7	-9	-11	-11	-12	-14	-16	-28	-37	-65	-85	-17	-26	-54	-74	-22	-23	-25	-25
eed	66%	-6	-7	-10	-11	-11	-12	-15	-16	-29	-38	(-67)	-88	-18	-27	-56	-77	-22	-23	-25	-26
Exc	60%	-7	-8	-10	-12	-12	-13	-15	-17	-30	-40	-70	-92	-19	-29	-59	-81	-23	-24	-26	-27
(E)	50%	-7	-8	-11	-13	-12	-13	-16	-18	-32	-42	-75	-100	-21	-32	-64	-89	-24	-25	-27	-28
EHZ	40%	-8	-9	-12	-14	-13	-14	-17	-19	-33	-45	-81	-107	-23	-34	-70	-97	-24	-25	-28	-29
of Cl	33%	-8	-10	-13	-15	-13	-15	-18	-20	-35	-47	-85	-113	-24	-37	-75	-103	-25	-26	-28	-29
ity	30%	-8	-10	-13	-15	-13	-15	-18	-20	-35	-48	-87	-116	-25	-37	-76	-105	-25	-26	-29	-30
abil	20%	-9	-11	-14	-16	-14	-16	-19	-21	-38	-51	-93	-125	-28	-41	-83	-115	-26	-27	-30	-31
rob	10%	-10	-12	-16	-18	-15	-17	-21	-23	-41	-56	-101	-135	-31	-45	-91	-125	-28	-29	-31	-33
	5%	-11	-13	-17	-20	-16	-18	-23	-25	-43	-59	-106	-142	-34	-49	-96	-131	-29	-30	-33	-34
	1%	-12	-14	-19	-22	-17	-19	-25	-28	-47	-63	-113	-151	-38	-53	-102	-140	-31	-32	-35	-37
	Max	-13	-16	-22	-26	-18	-21	-27	-31	-53	-71	-123	-162	-43	-60	-112	-151	-33	-35	-39	-41
	CEHZ2		-1	17*			-	-23				-106				-96				-33	
	CEHZ3			20*				-25				-142				-131	1:00 1 . 1			-34	

^{*}Cliff projection method has been used, so distance to future cliff toe position has been tabulated. Actual CEHZ width will be greater depending on cliff height and stable slope angle.

