R	Far North District Council
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Office Use Only Application Number:

Private Bag 752, Memorial Ave
Kaikohe 0440, New Zeoland
Freephone: 0800 920 029
Phone: (09) 401 5200
Fax: (09) 401 2137
Email: ask.us@fndc.govt.nz
Website: www.fndc.govt.nz

#### 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):

🕑 La	nd Use	O Fast	t Track Land Use*	<b>V</b> Subdivision	O Discharge	
O Ex	tension of time	(s.125) O Cha	nge of conditions (s.127)	O Change of Cons	ent Notice (s.221(3)	))
O co	onsent under Na	ational Environmer	ntal Standard (e.g. Assessi	ng and Managing Co	ntaminants in Soil)	
O Ot *The fas electron	her (please spe st track for simple ic address for servi	ccify) land use consents is ice.	restricted to consents with a co	ntrolled activity status an	d requires you provide	an
3.	Would you li	ke to opt out of the	e Fast Track Process?	Yes /	No	
4.	Applicant De	tails:				
Name/s Electro Service	s: nic Address f e (E-mail):					-
Phone	Numbers:					-
Postal ( <i>or</i> alter of servic section	Address: native method ce under 352 of the Act)					-
5.	Address for details here).	Correspondence:	Name and address for service	e and correspondence (i	f using an Agent write	their

Name/s:	ime/s: Nina Pivac (Tohu Consulting Limited)		
Electronic Address for Service (E-mail):	nina@tohuconsulting.nz		
Phone Numbers:	Work: 0210614725 Home	:	
Postal Address: ( <i>or</i> alternative method of service under	50-64 Commerce Street Kaitaia 0410	».	
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.

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

U	Building	Consent	(BC ref # if known)
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O Regional Council Consent (ref # if known)

O National Environmental Standard consent

O Other (please specify)

#### National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect 11. **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)

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 O no O don't know

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

#### **Assessment of Environmental Effects:** 12.

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.

#### **Billing Details:** 13.

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)

Email: Postal Address:

Phone Numbers:

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 20<sup>th</sup> 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:_ Signatu		t) f bill payer <sup>≧</sup> mandatory)	Date:	20/2/24

# 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:	e/s: Clifford Hau and Whetumarama Hetaraka		
Property Locatior	/ Address/: )	1A Moa Street, Ahipara	
7. Location	Application Sit	te Details: / Street Address of the proposed activity:	
Site Add Locatior	lress/ n:	1A Moa Street, Ahipara	
Legal De Certifica	escription: ite of Title:	Lot 2 DP 366836 Val Number:   271391   Please remember to attach a copy of your Certificate of Title to the application, along with relectionsent notices and/or easements and encumbrances (search copy must be less than 6 mon	evant ths old)
Site Visi Is there Is there Please caretake	t Requirements: a locked gate or a dog on the pro provide details of er's details. This Please contac	security system restricting access by Council staff? Y operty? Y f any other entry restrictions that Council staff should be aware of, e.g. health and sa is important to avoid a wasted trip and having to re-arrange a second visit. at applicant to arrange site visit.	es / <del>No</del> es / <del>No</del> fety,
8.	Description of Please enter a bri a recognized scal Notes, for further	<b>the Proposal:</b> lef description of the proposal here. Attach a detailed description of the proposed activity and de e, e.g. 1:100) to illustrate your proposal. Please refer to Chapter 4 of the District Plan, and Gu details of information requirements.	Jrawings (to idance
	Activity A: N	Ion-Complying subdivision in Coastal Living Zone	
	Activity B: L	and use consent for stormwater and visual amenity breaches	
	If this is an appli Cancellation of 0 Consent Notice requesting them	ication for an Extension of Time (s.125); Change of Consent Conditions (s.127) or Cl Consent Notice conditions (s.221(3)), please quote relevant existing Resource Conse identifiers and provide details of the change(s) or extension being sought, with reaso	nange or ents and ons for

#### 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, <u>www.fndc.govt.nz</u>. 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:	(please print)		
Signatu	 (signature)	Date:	29 February 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)
- O 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
- O 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** 



## COMBINED SUBDIVISION AND LAND-USE RESOURCE CONSENT APPLICATION

1A MOA STREET, AHIPARA LOT 2 DP 366836

## ASSESSMENT OF ENVIRONMENTAL EFFECTS

PREPARED FOR: CLIFFORD & WHETUMARAMA HAU

29 February 2024 REV A



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- Appendix A Scheme Plan
- Appendix B Certificate of Title
- Appendix C Site Suitability Reports
- Appendix D Written Approvals



## 1.0 THE APPLICANT AND PROPERTY DETAILS

То:	Far North District Council
Site address:	1A Moa Street, Ahipara
Applicant's name:	Clifford Hau and Whetumarama Hetaraka
Address for service:	Tohu Consulting Limited Attn: Nina Pivac 50-64 Commerce Street Kaitaia 0410
Legal description:	Lot 2 DP 366836
Site area:	8850m <sup>2</sup>
Site owner:	Clifford Hau and Whetumarama Hetaraka
Operative District Plan zoning:	Coastal Living Zone
Operative District Plan overlays/resource areas:	Nil
Proposed District Plan zoning:	Rural Lifestyle
Operative District Plan overlays/resource areas:	Treaty Settlement Area of Interest
Brief description of proposal:	Activity A: SubdivisionTo undertake a subdivision of Lot 2 DP 366836 to create one additionalallotment in the Coastal Living Zone, and all necessary easements. Theproposed subdivision will result in the following allotment areas:Lot 1 – 2095m² (contains existing dwelling)Lot 2 – 6746m² (currently vacant)Activity B: Land-useThe application also includes a land-use component in order to increasethe impermeable surface and visual amenity thresholds by way ofconsent notice to enable the future construction of a dwelling onproposed Lot 2.
Summary of reasons for consent:	As a bundled consent, the proposal has been assessed as a <b>Non-Complying Activity</b> under the Far North District Plan.

We attach an assessment of environmental effects that corresponds with the scale and significance of the effects that the proposed activity may have on the environment.

## AUTHOR



Nina Pivac Director I BAppSC I PGDipPlan I Assoc. NZPI

#### Date: 29 February 2024

Subdivision Application: C & W Hau – 1A Moa Street, Ahipara



# 2.0 PROPOSAL

The applicants, Clifford Hau and Whetumarama Hetaraka, propose to undertake a subdivision in the Coastal Living Zone to create one additional residential allotment. The application also includes a land-use component in order to increase the impermeable surface and visual amenity thresholds by way of consent notice to enable the future construction of a dwelling on proposed Lot 2.

#### Activity A: Subdivision

To undertake a subdivision of Lot 2 DP 366836 to create one additional allotment in the Coastal Living Zone, and all necessary easements. The proposed subdivision will result in the following allotment areas:

- Lot 1 2095m2 (contains existing dwelling)
- Lot 2 6746m2 (currently vacant)

The subdivision aspect of the proposal has been assessed as a Non-Complying Activity.

#### Activity B: Land-use

Land-use consent is sought to increase impermeable surface areas within proposed Lot 2 to the maximum allowable standard, in accordance with the Wilton Joubert Report attached as Appendix C. This would exceed the permitted and restricted discretionary thresholds as stipulated by Rules 10.7.5.1.6 and 10.7.5.3.8 Stormwater Management. Existing impermeable surfaces within proposed Lot 1 will also exceed the permitted and restricted discretionary thresholds for stormwater management.

In addition to the above, the applicant seeks to increase the visual amenity threshold to enable the future construction of a dwelling on proposed Lot 2. The applicant requests that the building envelope referred to in Visual Amenity Rule 10.7.5.2.2 be confirmed as the entire lot boundary to provide maximum flexibility for the location of buildings within private lots. The basis for this proposal is the fact that land within Lot 2 is not visually connected to the Coastal Environment or any other public viewing space, and threfore building location and design does not need to be controlled for the purpose of mitigating any potential adverse visual effects on the coast.

For ease of future compliance, it is considered that the above thresholds can be increased by way of consent notice.

The land-use aspect of the proposal has been assessed as a Discretionary Activity.

As a bundled consent, the proposal has been assessed as a **Non-Complying Activity** under the operative Far North District Plan (District Plan).

A Site Suitability Report has been prepared by Wilton Joubert in support of the application, which confirms that the subject site is able to accommodate the proposed development subject to the implementation of those recommendations outlined in their report. See **Appendix C.** The applicant accepts that these recommendations will form conditions of consent.



Written approvals have been provided by all adjoining neighbours. The relevant iwi authority, being Ngā Marae o Ahipara Takiwa - Roma, Wainui and Korou Kore, have also provided their written approval. See **Appendix D.** 

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 situated at 1A Moa Street, Ahipara and is legally described as Lot 2 DP 366836 (RT. 271391). A copy of the Certificate of Title (CT) is attached as **Appendix B**.

The subject site has a current land area of 8850m<sup>2</sup>. Proposed Lot 1 contains an existing dwelling and associated services while proposed Lot 2 is vacant and anticipated for future residential development.

Each lot is accessed via an existing ROW off Moa Street. The applicant accepts that consent conditions may be imposed requiring the ROW to be upgraded to the relevant Council Engineering Standards.



Figure 1: Aerial map showing subject site (Far North Maps)

In terms of vegetation, the site is largely in pasture with the exception of boundary planting along all boundaries.

There are no other significant areas of indigenous vegetation or significant habitats of indigenous fauna. No vegetation clearance is required as part of this application. However, to enhance visual screening of the site, the applicant proposes to undertake infill planting where there are gaps in the boundary planting.



The surrounding environment is largely residential in character to the north-west, and rural-lifestyle activities to the east. Based on the assessment of effects below, it is considered that the proposed level of development is consistent with existing development patterns in the surrounding environment.

## 4.0 DISTRICT PLAN RULES ASSESSMENT

#### **OPERATIVE DISTRICT PLAN**

#### SUBDIVISION:

An assessment of the proposal against the relevant subdivision rules of the Far North District Plan is provided below:

		•
Rule 13.7.2.1(ix) Subdivision within the Coastal Living Zone (minimum lot sizes)	Controlled: 4ha Restricted Discretionary: 8000m2 Discretionary: 5000m2 or a subdivision in terms of a managament plan.	The proposed subdivision is unable to meet any of this criteria. Resource consent is required for a <b>Non-Complying Activity</b>
Rule 13.7.2.2 Allotment Dimensions	A minimum square building envelope of 30m x 30m is required and should not encroach into the permitted activity boundary setbacks for the relevant zones.	Proposed Lot 1 contains an existing dwelling which will remain compliant with setback requirements. Proposed Lot 2 has ample area to accommodate multiple 30x30m building envelopes exclusive of setback requirements.

#### LANDUSE:

An assessment of the proposal against the relevant land-use rules of the Far North District Plan is provided below:

Coastal Living Zone Rule	Permitted Standards	Compliance
10.7.5.1.1 Visual Amenity	(a) any new building(s) with max GFA of 50m2; or	Proposed Lot 1 contains an existing dwelling as previously approved by Council.
	(b) any alteration/addition to an existing building which does not exceed 30% of the gross floor area of the building which is being altered or added to, provided that any alteration/addition does not exceed the height of the existing building and that any	In terms of visual amenity, land-use consent is sought for new residential development in Lot 2. It is proposed that for the purposes of visual amenity, a building envelope covering the entirety of the site is noted as part of the subdivision.



Coastal Living Zone Rule	Permitted Standards	Compliance
	alteration/addition is to a building that existed at 28 April 2000; or	Controlled Activity
	(c) replacement of any building so long as the replacement does not exceed the building envelope occupied by the previous building; or	
	(d) renovation or maintenance of any building.	
10.7.5.1.2 Residential Intensity	1 unit per 4ha of land.	Proposed Lot 1 contains an existing dwelling. Proposed Lot 2 will enable the construction of one single dwelling.
		Permitted
10.7.5.1.3 Scale of Activities	1 Person per 2000m <sup>2</sup> of land.	The residential use of the site will remain unchanged.
		Permitted
10.7.5.1.5 Building Height	The maximum height of any building shall be 8m	The existing building is less than 8m in height. Any future building on Lot 2 will be less than 8m in height.
		Permitted
10.7.5.1.5 Sunlight	2m + 45-degree recession plane	The existing dwelling will not encroach the recession plane. Future development within Lot 2 has the ability to comply with setback requirements and will not encroach the recession plane.
		Permitted
10.7.5.1.6 Stormwater Management	The maximum proportion or amount of the gross site area which may be covered by buildings and other impermeable surfaces shall be 10% or 600m2 whichever is the lesser.	Existing impermeable surfaces within Lot 1 exceed 20%. Land-use consent is also sought to increase the impermeable surface areas within Lot 2 to the maximum allowable standard, in accordance with the Wilton Joubert Report attached as Appendix C.
		Discretionary Activity
10.7.5.1.7 Setback from boundaries	Buildings shall be set back a minimum 10m from any site boundary, except that on any site with an area less than	Existing built development within Lot 1 will remain unchanged. Future development within Lot 2 has the ability to comply with setback requirements.



Coastal Living Zone Rule	Permitted Standards	Compliance
	5,000m <sup>2</sup> this set back shall be 3m from any site boundary.	
		Permitted
10.7.5.1.9 Transportation	Two onsite parking spaces	Lot 1 contains adequate onsite parking. Proposed Lot 2 has the
	Max TIF = 20	ability to accommodate ample onsite parking and maneouvring area.
		Permitted

Overall, resource consent is required as a Non-Complying Activity under the operative District Plan.

#### PROPOSED DISTRICT PLAN

The Proposed Far North District Plan (PDP) was notified on Wednesday 27 July 2022. Rules in a Proposed Plan have legal effect once the council makes a decision on submissions relating to that rule and publicly notified this decision, unless the rule has immediate legal effect in accordance with section 86(3) of the Resource Management Act 1991 (the Act).

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, only rules in the PDP with immediate legal effect are relevant. These rules are identified with a 'hammer' in the plan. Rules that do not have immediate legal effect do not trigger the need for a resource consent under the PDP.

An assessment of the proposal against the rules with immediate legal effect has been undertaken. In this case there are none that are relevant to the proposal. Therefore, no consideration needs to be given to any of the rules under the PDP.

# 5.0 NATIONAL ENVIRONMENTAL STANDARDS FOR CONTAMINATED SOILS (NES CONTAMINATED SOILS)

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 land use.

Based on a search of Council records, historic aerial images and archives, 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 NATIONAL ENVIRONMENTAL STANDARDS FOR FRESHWATER (NES FRESHWATER)

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 NATIONAL POLICY STATEMENT FOR HIGHLY PRODUCTIVE LAND (NPSHPL)

The subject site contains LUC 6 soils which are not deemed as 'highly productive' under the NPSHPL. Therefore, no further consideration needs to be given under the NPSHPL.

# 8.0 NATIONAL POLICY STATEMENT FOR INDIGENOUS BIODIVERSITY (NPS-IB)

The objective of the NPS-IB is to 'maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss in indigenous biodiversity after the commencement date'. The NPS-IB aims to achieve this in a number of ways including by protecting and restoring indigenous biodiversity as necessary to achieve the overall maintenance of indigenous biodiversity. The site does not contain any significant areas of indigenous vegetation or habitats for indigenous fauna.

## 9.0 PUBLIC NOTIFICATION ASSESSMENT (SECTIONS 95A, 95C TO 95D)

## 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 apply, therefore public notification is not precluded.

Step 3 must be considered.

#### Step 3: Public notification required in certain circumstances

Public notification is precluded 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.

The proposal requires consideration under s95D of the Act. An assessment of environmental effects is provided in Section 8.0 below which concludes that any adverse effect will be less than minor.

#### 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.

If the answer is yes, then those persons are required to be notified.

In this case, the proposal is for a subdivision activity to accommodate future residential development on a Coastal Living zoned site. As such, it is considered that this level of development is anticipated by the Far North District Plan and that there is nothing out of the ordinary that could give rise to special circumstances.

#### Public Notification Conclusion

Having undertaken the s95A public notification tests, the following conclusions are reached:

- Under step 1, public notification is not mandatory;
- Under step 2, public notification is not precluded;
- Under step 3, public notification is not required as effect will be less than minor; and
- Under step 4, there are no special circumstances.

Therefore, this application can be processed without public notification.



## 10.0 LIMITED NOTIFICATION ASSESSMENT (SECTIONS 95B, 95E TO 95G)

#### 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).

The above does not apply to the proposal, and therefore limited notification is not precluded.

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

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

- In the case of a boundary activity, an owner of an allotment with an infringed boundary;
- In the case of a prescribed activity under s360H(1(b), a prescribed person; and
- In the case of any other activity, a person affected in accordance with s95E.

The application is not for a boundary or prescribed activity as defined in the Act or a prescribed activity under s360H(1)(b), and therefore an assessment in accordance with S95E is required, of which is set out below.

Overall, it is considered that any adverse effects in relation to adjacent properties will be less than minor, and accordingly that no persons are adversely affected.

#### Step 4: Further notification in special circumstances

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

In this instance, having regard to the assessment above, special circumstances are not considered to apply to this proposal.

#### **SECTION 95E STATUTORY MATTERS**

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

The sections below set out an assessment in accordance with section 95E, and an assessment of potential adverse effects.



#### Written Approvals

Address	Legal Description	Owner/s
46B Moa Street	Lot 2 DP 432431	Cornelis Deelstra
		Geralda Petronella Maria Deelstra
42 Kiwi Street	Lot 3 DP 202942	Aaron Christopher MacCarthy-Morrogh
		Andrew Gordon MacCarthy-Morrogh
		Michelle Theresa Puckey
		Jodi Maree Fryer
230 Ahipara/Sandhills	Lot 4 DP 360893	Suzie Maugham
Road		Rawiri Norman Te Paa
1C Moa Street	Lot 3 DP 366836	Ria Norah Leefe-Smith
		Darryl Murdoch Smith
1B Moa Street	Lot 1 DP 366836	Ria Nora Leefe-Smith
		Darryl Murdoch Smith
40 Takahe Road	Section 133 Block IV Ahipara	Maynard Ernst Gilgen
	Survey District	Meredith Mamari Havelund Stephens

As per Appendix D, written approvals have been provided by the following parties:



Figure 2: Map showing potentially affected parties (Premise)

The relevant iwi authority, being Ngā Marae o Ahipara Takiwa - Roma, Wainui and Korou Kore, have also provided their written approval. See **Appendix D.** 

#### **Permitted Baseline**

The Coastal Living Zone provides for the construction of one dwelling per site as a permitted activity under the Residential Intensity rules. Proposed Lot 1 contains an existing dwelling as per Council approvals. The proposed subdivision will enable the construction of a single dwelling on proposed Lot 2. This forms a permitted baseline which could usefully be applied to the situation.



#### Assessment of Effects on the 'Localised Environment'

The matters to which Council shall restrict its discretion, as outlined in Sections 13.7.3 and 13.10 of the Far North District Plan, are addressed below:

#### AMENITY, CHARACTER AND LANDSCAPE EFFECTS

The subject site is located in the Ahipara Village, on the fringe of the Residential Zone along Takahe Road. The proposed subdivision will result in one additional allotment and will effectively act as an extension of existing development patterns emerging along Takahe Road and on Moa Street. Although the subject site is located approximately 350m from the coastal environment, the site is not visually connected to the coastal environment owing to topography and existing built development along Takahe Road.

Proposed Lot 1 is already in residential use which will remain unchanged. With an area of 2095m<sup>2</sup>, this lot is still larger than those residential sites located to the west which range from 500m<sup>2</sup> to 1000m<sup>2</sup> in area.

Proposed Lot 2 is currently vacant and anticipated for future residential use. With an area of 6754m<sup>2</sup>, it is considered that there is ample land area available to accommodate future residential development and associated services, whilst maintaining adequate open space so as to maintain the amenity of the Coastal Living Zone. The generous, rectangular shape and size of proposed Lot 2 will easily accommodate a future dwelling of a similar size and scale to those emerging in the immediate Takahe Road and Moa Street area.

In terms of visual amenity, proposed Lot 2 is completely screened from Takahe Road by the existing dwelling on Lot 1. Proposed Lot 2 is not viewable from any other public vantage points.

There is some boundary planting along most boundaries of the subject site, with the planting along the north-eastern boundary being well-established and providing an effective vegetative buffer between proposed Lots 1 and 2 and the adjoining Lot 3 DP 202942.

The adjoining property to the south-east (Lot 4 DP 360893) is zoned Rural Production but is completely screened from the subject site owing to the topography where the contour rises creating an almost mound-like feature along the south-eastern boundary of Lot 2, see Figure 3 below.



Figure 3: Image of Lot 2 showing visual buffer between Lot 2 and the adjoining Lot 4 DP 360893



The applicant has undertaken some planting along all other boundaries. However, this will need to be infilled to enhance the visual buffer between the subject site and all other adjoining properties. The applicant anticipates that this will form a condition of consent.

As discussed earlier, the south-eastern boundary of Lot 2 adjoins the Rural Production Zone which could potentially be considered more sensitive in terms of the compatibility of the proposed residential development and rural production activities. It is for this reason that proposed Lot 2, which will adjoin the Rural Production Zone on the south-eastern boundary, will contain the larger land area compared to Lot 2. This will enable greater flexibility in terms of the ability to locate dwellings away from potentially sensitive productive land use.

As previously discussed, it is proposed that the building envelope referred to in Visual Amenity Rule 10.7.5.2.2 be confirmed as the entire lot boundary to provide maximum flexibility for the location of buildings within proposed Lot 2. The basis for this proposal is the fact that land within proposed Lot 2 is not visually connected to the Coastal Environment and therefore building location and design does not need to be controlled for the purpose of mitigating any potential adverse visual effects on the coast. This would also include any building design controls relating to exterior colour and reflectivity of a building.

As confirmed in the Site Suitability Report prepared by Wilton Joubert, minimal physical works will be required for future development on proposed Lot 2, and the contour will remain consistent with existing built development on Moa Street and surrounds. A review of all relevant statutory and planning documents reveals that the subject site does not have any particular landscape significance.

Overall, on the basis of the above and given the sites' location away from the coastal environment, it is considered that any potential adverse visual effects arising from the proposal would be less than minor. The proposed subdivision layout and likely future residential development would be consistent with the residential character emerging in the immediate surrounding environment. Nonetheless, written approvals have been provided by all adjoining property owners. Any potential adverse effect on these parties can therefore be disregarded.

## INDIGENOUS FLORA AND FAUNA

The site does not contain any significant areas of indigenous vegetation or significant habitats of indigenous fauna. No vegetation clearance is required.

#### NATURAL AND OTHER HAZARDS

As per NRC Maps, the site is not subject to any natural or other hazards. The Site Suitability Report prepared by Wilton Joubert states that there is some flood prone land to the northwest of the subject site that is generally confined to the river outlet entering Te-Oneroa-a-Tohe (Ninety Mile Beach) along the coastline. However, given that the proposed development areas, including the investigated platform within proposed Lot 2, is elevated approximately 10-11m above the mapped 100-year predicted river and coastal flood zones as well as being setback from the area (>250m), the



report concludes that the flood zonationw ill have no impact on any future development within the nominated building platform on proposed Lot 2.

#### PROPERTY ACCESS

The subject site is currently accessed via a ROW off Moa Street. It is considered that Moa Street has been constructed to an adequate standard and thus no upgrades to this public road are anticipated. However, the applicant accepts that consent conditions may be imposed requiring the private ROW to be upgraded to the relevant Council Engineering Standards.

#### INFRASTRUCTURE AND SERVICING EFFECTS

#### <u>Lot 1</u>

Proposed Lot 1 is fully serviced in terms of telecommunications, electricity, stormwater disposal and wastewater disposal.

The existing dwelling is connected to Council's reticulated sewer system which is performing adequately.

Existing impermeable surfaces within Lot 1 equate to 26.1% exceeding the permitted threshold of 10% and restricted discretionary threshold of 15%. However, the Wilton Joubert Report concludes that any adverse effect in relation to stormwater generated from Lot 1 will be less than minor subject to the implementation of those mitigation measures outlined in the report. These include the following:

- That discharge and overflow from the existing potable water tank be directed via sealed pipes to an appropriate discharge outlet in the existing channel near Lot 1's south-eastern boundary.
- The existing discharge point/discharge outlet may be utilised if it is functioning and located within Lot 1's boundaries.
- It is noted that the above measures are examples and indicative only, and that alternative designs are also acceptable. A separate detention tank may be utilised to provide the required detention volume.

## <u>Lot 2</u>

Proposed Lot 2 is currently vacant and anticipated for residential use. Telecommunications and electricity connections are available to this site.

As confirmed by Council's Infrastructure Team, proposed Lot 2 is unable to connect to Council's reticulated sewer system. Therefore, onsite wastewater disposal must be provided on this lot at the time of future development. The Wilton Joubert Report concludes that proposed Lot 2 is able to accommodate adequate onsite wastewater disposal and recommends that specific TP58 design be provided at building consent stage. It is anticipated that this will form a consent notice condition.

As attached in Appendix C, Wilton Joubert has comprehensively assessed stormwater management in their engineering report. While the report considers it most appropriate to provide specific design of attenuation and installation to be undertaken at building consent, Wilton Joubert have designed some example solutions for proposed Lot 2 based on attenuation of the post-development peak



flow to the pre-development rates. As outlined in the report, example stormwater management measures for residential development within Lot 2 include (but are not limited to):

- Capturing roofwater using a gutter system conveyed to potable water tanks;
- One of the potable water tanks is to be fitted with a 100mm overflow outlet directing runoff via sealed pipes to a soakpit silt trap. This silt trap shall be fitted with a 100mm outlet pipe draining to a proposaed soakpit as specified in the report.
- The existing and future driveway areas are to be shaped to shed runoff to a soakage trench(s). The soakage trench is to be designed in accordance with the Wilton Joubert Report.
- Where required, overland flows and similar runoff from higher ground should be intercepted by means of shallow wurface drains or small bunds near structures to protect these from both saturation and erosion.
- Again, it is noted that the above measures are examples and indicative only, and that alternative designs are also acceptable. A separate detention tank may be utilised to provide the required detention volume.

Overall, the Wilton Joubert Report concludes that any adverse effects in relation to infrastructure and servicing will be less than minor provided that the recommendations outlined in the report are adhered to.

## EASEMENTS FOR ANY PURPOSE

As per the scheme plan, all necessary easements will be provided.

## PRESERVATION OF HERITAGE RESOURCES

Cultural and heritage effects were comprehensively addressed as part of the original subdivision referenced 2050492-RMASUB which concluded that there are no archaeological or heritage features within or adjacent to the site. A review of the NZAA Archsite database also indicates that there are no registered archaeological sites within the subject site. Far North Maps show that the property does not contain any registered Sites of Cultural Significance. Nonetheless, the applicant has consulted with the relevant iwi authority being Ngā Marae o Ahipara Takiwa - Roma, Wainui and Korou Kore who have provided their written approval, as per **Appendix D**.

## ACCESS TO RESERVES AND WATERWAYS

The subject site has no reserves or waterways nearby.

## LAND USE COMPATIBILITY

Proposed Lot 1 is already in residential use which will remain unchanged. With an area of 2095m<sup>2</sup>, this lot is still larger than those residential sites located to the west which range from 500m<sup>2</sup> to 1000m<sup>2</sup> in area.

Proposed Lot 2 is currently vacant and anticipated for future residential use. With an area of 6754m<sup>2</sup>, it is considered that there is ample land area available to accommodate future residential development and associated services, whilst maintaining adequate open space so as to maintain the amenity of the Coastal Living Zone. The generous, rectangular shape and size of proposed Lot 2 will easily accommodate a future dwelling of a similar size and scale to those emerging in the immediate Takahe Road and Moa Street area.



As discussed earlier, the south-eastern boundary of Lot 2 adjoins the Rural Production Zone which could potentially be considered more sensitive in terms of the compatibility of the proposed residential development and rural production activities. It is for this reason that proposed Lot 2, which will adjoin the Rural Production Zone on the south-eastern boundary, will contain the larger land area compared to Lot 2. This will enable greater flexibility in terms of the ability to locate dwellings away from potentially sensitive productive land use.

#### PROXIMITY TO AIRPORTS

The subject site is located at least 22km from the nearest airport. As such, this matter is not relevant to the proposal.

#### PRECEDENT AND CUMULATIVE EFFECTS

It is noted that there are numerous properties in the immediate vicinity which are similarly zoned Coastal Living, including the Weka Street subdivision to the north-east, where allotment sizes range from 800m<sup>2</sup> to 6000m<sup>2</sup>. Further north from Weka Street, is another property which is zoned Coastal Living and has a land area of 1325m<sup>2</sup> (Lot 1 DP 78146). With proposed lot sizes of 2095m<sup>2</sup> and 6754m<sup>2</sup>, the proposed development will not be setting a precedent.

In terms of cumulative effects, the proposed subdivision will result in the creation of one additional allotment of 6754m<sup>2</sup> which is considered ample land area to accommodate future residential development whilst maintaining the amenity of the Coastal Living Zone. The proposed lot sizes are considered to consistent with existing development patterns in the immediate surrounding environment, and will not give rise to any reverse sensitivity effects on adjacent production activities.

#### CONCLUSION

Taking the above into account, it is considered that there will be no adverse effects on the wider and localised environment. As such, no parties are considered to be adversely affected.

#### LIMITED NOTIFICATION CONCLUSION

Having undertaken the s95B limited notification tests, the following conclusions are reached:

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

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

## 11.0 CONSIDERATION OF APPLICATIONS (SECTION 104)

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



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

## 12.0 EFFECTS ON THE ENVIRONMENT (SECTION 104(1)(A))

An assessment of effects on adjacent properties has been provided and it was concluded that any adverse effects will be less than minor.

Further, it is considered that the proposal will result in positive effects including the following:

- Addressing the current housing crisis that the ever-growing Far North population is experiencing;
- Contributing to the local economy through the engagement of local contractors;
- Contributing to the social and economic well-being of the applicants.

Overall, it is considered that when taking into account the positive effects, any actual and potential adverse effects on the environment of allowing the activity are appropriate.

## 13.0 DISTRICT PLAN AND STATUTORY DOCUMENTS (SECTION 104(1)(B))

The following planning documents prepared under the RMA are considered relevant to this application.

## **Regional Policy Statement for Northland**

The Northland Regional Policy Statement (RPS) covers the management of natural and physical resources across the Northland region. The provisions within the RPS give guidance at a higher planning level in terms of significant regional issues, therefore providing guidance to consent applications and the development of District Plans on a regional level. Given the nature and scale of the proposal, which will result in one additional residential allotment, it is considered that this level of development is compatible with the intent of the RPS.

## **Operative Far North District Plan – Objectives and Policies**

The relevant objectives and policies of the District Plan can be found in the Coastal Living Zone and Subdivision Chapters and are assessed as follows:

Coastal Living Zone Objectives		
Objectives	Comment	
10.7.3.1 To provide for the well-being of people	The proposed subdivision will enable the	
by enabling low density residential	creation of one additional allotment	
development to locate in coastal areas where	anticipated for residential use. The site is not	
any adverse effects on the environment of such	located within the coastal environment or near	
development are able to be avoided, remedied	the CMA. As per the assessment of effects, the	
or mitigated.	subdivision has been designed so as to not	



	result in any adverse effects on the environment.
10.7.3.2 To preserve the overall natural character of the coastal environment by providing for an appropriate level of subdivision and development in this zone.	The application will enable the construction of a single additional dwelling on a vacant site. No earthworks or vegetation clearance are required. All existing vegetation will be maintained.

Coastal Living Zone Policies		
Policies	Comment	
10.7.4.1 That the adverse effects of subdivision, use, and development on the coastal environment are avoided, remedied or mitigated.	As per the assessment of effects, the coastal environment will not be affected by the proposal.	
10.7.4.2 That standards be set to ensure that subdivision, use or development provides adequate infrastructure and services and maintains and enhances amenity values and the quality of the environment.	As per the attached TP58 and Stormwater Reports, stormwater and wastewater will be managed appropriately. Amenity values and the quality of the environment will not be adversely affected.	
10.7.4.3 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the zone in regards to s6 matters, and shall avoid adverse effects as far as practicable by using techniques including: (a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns; (b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area; (c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas; (d) through siting of buildings and development, design of subdivisions, and provision of access that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the District (refer Chapter 2, and in particular Section 2.5, and Council's "Tangata Whenua Values and Perspectives (2004)");	a single dwelling on a vacant site anticipated for residential development. Minimal earthworks are required, no vegetation clearance is required. The site does not contain any significant areas of indigenous vegetation or habitats of indigenous fauna, nor does the site contain any archaeological or heritage sites.	



Coastal Living Zone Policies		
Policies	Comment	
(e) providing planting of indigenous vegetation in a way that links existing habitats of		
indigenous fauna and provides the opportunity for the extension, enhancement or creation of		
habitats for indigenous fauna, including mechanisms to exclude pests;		
(f) protecting historic heritage through the		
of subdivisions.		

Subdivision Chapter - Objectives		
Objective	Comment	
13.3.1 To provide for the subdivision of land in such a way as will be consistent with the purpose of the various zones in the Plan, and will promote the sustainable management of the natural and physical resources of the District, including airports and roads and the social, economic and cultural well being of people and communities.	As concluded in the assessment of effects, the proposed subdivision will be keeping in character with the surrounding environment. The subdivision will provide for the social and economic well-being of current and future owners of the site.	
13.3.2 To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly from subdivision, including reverse sensitivity effects and the creation or acceleration of natural hazards, are avoided, remedied or mitigated	The life-supporting capacity of natural resources will not be affected by the subdivision, nor will the proposal give rise to reverse sensitivity effects or exacerbate natural hazards.	
13.3.3 To ensure that the subdivision of land does not jeopardise the protection of outstanding landscapes or natural features in the coastal environment.	No such landscapes of features will be affected.	
13.3.4 To ensure that subdivision does not adversely affect scheduled heritage resources through alienation of the resource from its immediate setting/context.	No such resources will be affected.	
13.3.5 To ensure that all new subdivisions provide a reticulated water supply and/or on-site water storage and include storm water management sufficient to meet the needs of the activities that will establish all year round.	Proposed Lot 1 is already in residential use which will remain unchanged. As concluded in the Site Suitability Report, proposed Lot 2 has the ability to accommodate future residential development and adequate services.	
13.3.6 To encourage innovative development and integrated management of effects between subdivision and land use which results in superior outcomes to more traditional forms of subdivision, use and development, for example the protection, enhancement and restoration of areas and features	N/a	

Subdivision Chapter - Objectives		
Objective	Comment	
which have particular value or may have been		
compromised by past land management practices.		
13.3.7 To ensure the relationship between Maori and their ancestral lands, water, sites, wahi tapu and other taonga is recognised and provided for.	There are no recorded archaeological sites or registered Sites of Cultural Significance within, or in proximity to, the subject site. Iwi have provided their written approval. It is therefore considered that the proposed subdivision will not result in any adverse cultural effects.	
13.3.8 To ensure that all new subdivision provides an electricity supply sufficient to meet the needs of the activities that will establish on the new lots created.	Electricity supply is not a requirement in the Coastal Living Zone. However, connections are available.	
13.3.9 To ensure, to the greatest extent possible, that all new subdivision supports energy efficient design through appropriate site layout and orientation in order to maximise the ability to provide light, heating, ventilation and cooling through passive design strategies for any buildings developed on the site(s).	Owing to the topography, the site has the ability to accommodate future dwellings with a northerly aspect.	
13.3.10 To ensure that the design of all new subdivision promotes efficient provision of infrastructure, including access to alternative transport options, communications and local services.	There are no alternative transport options available to the site.	
13.3.11 To ensure that the operation, maintenance, development and upgrading of the existing National Grid is not compromised by incompatible subdivision and land use activities	Not applicable.	

Subdivision Chapter - Policies		
Objective	Comment	
13.4.1 That the sizes, dimensions and distribution of	As concluded in the assessment of effects, the	
allotments created through the subdivision process	proposed subdivision will not result in such adverse	
be determined with regard to the potential effects	effects.	
including cumulative effects, of the use of those		
allotments on:		
(a) natural character, particularly of the coastal		
environment;		
(b) ecological values;		
(c) landscape values;		
(d) amenity values;		
(e) cultural values;		
(f) heritage values; and		
(g) existing land uses.		
13.4.2 That standards be imposed upon the	All vehicle crossings will be constructed/upgraded in	
subdivision of land to require safe and effective	accordance with Council's Engineering Standards.	
vehicular and pedestrian access to new properties.		
13.4.3 That natural and other hazards be taken into	As concluded in the Site Suitability Report, the	
account in the design and location of any	proposed development will not exacerbate any	
subdivision.	natural hazards.	



Subdivision Chapter - Policies		
Objective	Comment	
13.4.4 That in any subdivision where provision is	The site has existing connections to electricity and	
made for connection to utility services, the potential	telecommunications. New connections are available	
adverse visual impacts of these services are avoided.	for Lot 2.	
13.4.5 That access to, and servicing of, the new	Minimal earthworks are required.	
allotments be provided for in such a way as will	No vegetation clearance is required.	
avoid, remedy or mitigate any adverse effects on		
neighbouring property, public roads (including State		
Highways), and the natural and physical resources of		
the site caused by silt runoff, traffic, excavation and		
filling and removal of vegetation.		
13.4.6 That any subdivision proposal provides for	No such resources will be affected.	
the protection, restoration and enhancement of		
heritage resources, areas of significant indigenous		
vegetation and significant habitats of indigenous		
fauna, threatened species, the natural character of		
the coastal environment and riparian margins, and		
outstanding landscapes and natural features where		
appropriate.		
13.4.7 That the need for a financial contribution be	Not applicable.	
considered only where the subdivision would:		
(a) result in increased demands on car parking		
associated with non-residential activities; or		
(b) result in increased demand for esplanade areas;		
Of		
(d) depend on the assimilative canacity of the		
(u) depend on the assimilative capacity of the		
12.4.8 That the provision of water storage be taken	The sites are able to accommodate adequate on-site	
into account in the design of any subdivision	water supply	
13.4.9 That bonus development donor and recipient	Not applicable	
areas be provided for so as to minimise the adverse		
effects of subdivision on Outstanding Landscapes		
and areas of significant indigenous flora and		
significant habitats of fauna.		
13.4.10 The Council will recognise that subdivision	Not applicable.	
within the Conservation Zone that results in a net		
conservation gain is generally appropriate.		
13.4.11 That subdivision recognises and provides for	There are no recorded archaeological sites or	
the relationship of Maori and their culture and	registered Sites of Cultural Significance within, or in	
traditions, with their ancestral lands, water, sites,	proximity to, the subject site. Iwi have provided	
waahi tapu and other taonga and shall take into	their written approval. It is therefore considered	
account the principles of the Treaty of Waitangi.	that the proposed subdivision will not result in any	
	adverse cultural effects.	
13.4.12 That more intensive, innovative	Not applicable.	
development and subdivision which recognises		
specific site characteristics is provided for through		
the management plan rule where this will result in		
superior environmental outcomes.		



Subdivision Chapter - Policies		
Objective	Comment	
13.4.13 Subdivision, use and development shall	As concluded in the assessment of effects, the	
preserve and where possible enhance, restore and	subdivision is able to achieve this policy.	
rehabilitate the character of the applicable zone in		
regards to s6 matters. In addition subdivision, use		
and development shall avoid adverse effects as far		
as practicable by using techniques including: (a)		
clustering or grouping development within areas		
where there is the least impact on natural character		
and its elements such as indigenous vegetation,		
landforms, rivers, streams and wetlands, and		
coherent natural patterns; (b) minimising the visual		
impact of buildings, development, and associated		
vegetation clearance and earthworks, particularly as		
seen from public land and the coastal marine area;		
(c) providing for, through siting of buildings and		
development and design of subdivisions, legal public		
right of access to and use of the foreshore and any		
esplanade areas; (d) through siting of buildings and		
of access that recognice and provide for the		
of access that recognise and provide for the		
and taonga including concents of mauri tanu mana		
webi and karakia and the important contribution		
Maori culture makes to the character of the District		
(refer Chanter 2 and in particular Section 2.5 and		
Council's "Tangata Whenua Values and		
Perspectives" (2004): (e) providing planting of		
indigenous vegetation in a way that links existing		
habitats of indigenous fauna and provides the		
opportunity for the extension, enhancement or		
creation of habitats for indigenous fauna, including		
mechanisms to exclude pests; (f) protecting historic		
heritage through the siting of buildings and		
development and design of subdivisions. (g)		
achieving hydraulic neutrality and ensuring that		
natural hazards will not be exacerbated or induced		
through the siting and design of buildings and		
development.		
13.4.14 That the objectives and policies of the	This assessment concludes that the subdivision is	
applicable environment and zone and relevant parts	consistent with the relevant objectives and policies	
of Part 3 of the Plan will be taken into account when	of the District Plan.	
considering the intensity, design and layout of any		
subdivision.		
13.4.15 That conditions be imposed upon the design	It is anticipated that a number of conditions will be	
of subdivision of land to require that the layout and	imposed including those relating to servicing,	
orientation of all new lots and building platforms	toundation design and general accordance	
created include, as appropriate, provisions for	conditions.	
achieving the following: (a) development of energy		
efficient buildings and structures; (b) reduced travel		
ustances and private car usage; (c) encouragement		
transport facilities (a) demostie or community		
transport facilities; (e) domestic or community		



Subdivision Chapter - Policies		
Objective	Comment	
renewable electricity generation and renewable		
energy use.		
13.4.16 When considering proposals for subdivision	Not applicable.	
and development within an existing National Grid		
Corridor the following will be taken into account: (a)		
the extent to which the proposal may restrict or		
inhibit the operation, access, maintenance,		
upgrading of transmission lines or support		
structures; (b) any potential cumulative effects that		
may restrict the operation, access, maintenance,		
upgrade of transmission lines or support structures;		
and		
(c) whether the proposal involves the establishment		
or intensification of a sensitive activity in the vicinity		
of an existing National Grid line.		

#### 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 Subdivision and Rural Lifestyle Chapters. 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:

- SUB-01
- SUB-03
- SUB-P1
- SUB-P3
- SUB-P4
- SUB-P6
- SUB-P8
- SUB-P11
- RLZ-01 to RLZ-04
- RLZ-P1 to RLZ-P4

#### Conclusion

For the reasons outlined above, it is considered that the proposal is consistent with the relevant objectives and policies of the RPS, ODP, and PDP.

## 14.0 PART 2 MATTERS

Section 5 of Part 2 identifies the purpose of the RMA as being the sustainable management of natural and physical resources. This means managing the use, development and protection of natural and physical resources in a way that enables people and communities to provide for their social, cultural and economic well-being and health and safety while sustaining those resources for

future generations, protecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

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

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

Section 8 requires Council to take into account the principles of the Treaty of Waitangi. Preconsultation has been undertaken with the relevant iwi authority as per Appendix D.

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

## 15.0 OTHER MATTERS (SECTION 104(1)(C)

There are no other matters considered relevant to this proposal.

## 16.0 CONCLUSION

The application involves two components as follows:

## Activity A: Subdivision

To undertake a subdivision of Lot 2 DP 366836 to create one additional allotment in the Coastal Living Zone, and all necessary easements. The proposed subdivision will result in the following allotment areas:

- Lot 1 2095m2 (contains existing dwelling)
- Lot 2 6746m2 (currently vacant)

## Activity B: Land-use

The application also includes a land-use component in order to increase the impermeable surface and visual amenity thresholds by way of consent notice to enable the future construction of a dwelling on proposed Lot 2.

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

Written approvals have been provided by all potentially affected parties, inculding the relevant iwi authority.

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.

It is respectfully requested that draft conditions are sent to the agent for review prior to the issuing of any decision.

#### **AUTHOR**



Nina Pivac Director I BAppSC | PGDipPlan | Assoc. NZPI

Date: 29 February 2024



Appendix A – Scheme Plan



EXISTING EASEMENTS IN GROSS			
PURPOSE	SHOWN	BURDENED LAND	GRANTEE: DOCUMENT
DRAINAGE	(A)	LOT 2 HEREON	FAR NORTH DISTRICT COUNCIL
	©	LOT 1 HEREON	El 7045183.4
RIGHT TO CONVEY ELECTRICITY	(A) (B)	LOT 2 HEREON	TOP ENERGY LIMITED EI7045183.5

EXISTING EASEMENTS

PURPOSE SHOWN BURDENED DOCUMENT

## IMPERMEABLE AREAS LOT 1 (0.2095ha)

House 294m<sup>2</sup> Concrete 245m<sup>2</sup> Tank 9m<sup>2</sup>

Total Area = 548m<sup>2</sup> (26.1%)

LOT 2 (0.6754ha) Drive 938m<sup>2</sup>

Total Area =  $938m^2$  (13.9%)

RIGHT OF WAY RIGHT TO CONVEY ELECTRICITY AND TELECOMMUNICATIONS	LOT 2 HEREON	EI7045183.3

#### MEMORANDUM OF PROPOSED EASEMENTS

PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
RIGHT OF WAY RIGHT TO CONVEY ELECTRICITY AND TELECOMMUNICATIONS RIGHT TO DRAIN SEWAGE AND RIGHT TO DRAIN WATER	(A) (B)	LOT 2 HEREON	LOT 1 HEREON

Local Authority: Far North District Council Zone: Total Area: 0.8850ha Comprised in: RT271391 Origin of Levels: Levels in terms of: Contour interval is: THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF WILLIAMS & KING AND MAY NOT BE REPRODUCED WITH-OUT THE WRITTEN PERMISSION OF WILLIAMS & KING

AREAS AND MEASUREMENTS SUBJECT TO FINAL SURVEY This plan and accompanying report(s) have been prepared for the purpose of obtaining a Resource Consent only and for no other purpose. Use of this plan and/or information on it for any other purpose is at the user's risk





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

Identifier271391Land Registration DistrictNorth AucklandDate Issued26 September 2006

Prior References NA131A/300

Estate	Fee Simple
Area	8850 square metres more or less
Legal Description	Lot 2 Deposited Plan 366836
<b>Registered Owners</b>	

Clifford Hetatana Hau and Whetumarama Christine Hetaraka

#### Interests

Saving and excepting all minerals within the meaning of the Land Act 1924 on or under the land B647286.1 Compensation Certificate pursuant to Section 19 Public Works Act 1981 by The Mangonui County Council -31.3.1987 at 9.41 am D551249.8 Consent Notice pursuant to Section 221 (1) Resource Management Act 1991 - 20.10.2000 at 3.17 pm 7045183.1 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 26.9.2006 at 9:00 am Subject to a right of way and electricity, drainage and telecommunications right over parts marked A and B on DP 366836 created by Easement Instrument 7045183.3 - 26.9.2006 at 9:00 am Appurtenant hereto is a drainage right created by Easement Instrument 7045183.3 - 26.9.2006 at 9:00 am The easements created by Easement Instrument 7045183.3 are subject to Section 243 (a) Resource Management Act 1991 Subject to a drainage right (in gross) over parts marked A and G on DP 366836 in favour of Far North District Council created by Easement Instrument 7045183.4 - 26.9.2006 at 9:00 am

Subject to a right (in gross) to convey electricity over parts marked A and B on DP 366836 in favour of Top Energy Limited created by Easement Instrument 7045183.5 - 26.9.2006 at 9:00 am

The easements created by Easement Instrument 7045183.5 are subject to Section 243 (a) Resource Management Act 1991 10340864.4 Mortgage to ASB Bank Limited - 21.3.2016 at 4:18 pm





Private Bag 752, Memorial Ave Kaikohe 0400, New Zealand Freephone: 0800 920 029 Phone: (09) 405 2750 Fax: (09) 401 2137 Emoil: osk.us@Indc.govt.nz Website: www.Indc.govt.nz

## THE RESOURCE MANAGEMENT ACT 1991

#### SECTION 221 : CONSENT NOTICE

REGARDING RC 2050492 the Subdivision of Lot 4 DP 202942 North Auckland Registry

PURSUANT to Section 221 for the purpose of Section 224 of the Resource Management Act 1991, this Consent Notice is issued by the FAR NORTH DISTRICT COUNCIL to the effect that conditions described in the schedule below are to be complied with on a continuing basis by the subdividing owner and the subsequent owners after the deposit of the survey plan, and is to be registered on the titles of Lots 1 - 3 DP 366836.

#### SCHEDULE

Without the prior approval of the Council, no building shall be erected, nor (i) any works which increase impermeable surfaces be undertaken, nor any planting or structure placed which may create a flow obstruction, on any area of the site which has been proposed as a secondary / overland  $(Q_{100})$ flow path as shown on the survey plan for the allotments as drainage easements D, E, F, G, H and J.

SIGNED:

Mr Pat Killalea

By the FAR NORTH DISTRICT COUNCIL Under delegated authority: RESOURCE CONSENTS MANAGER

DATED at KAIKOHE this Ist day of August 2006
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# THE RESOURCE MANAGEMENT ACT 1991 SECTION 221: CONSENT NOTICE

#### IN THE MATTER of Plan 202942

D551249.8 CONO

**PURSUANT** to Section 221 and for the purposes of Section 224 of the Resource Management Act 1991, this Consent Notice is issued by <u>THE FAR NORTH</u> <u>DISTRICT COUNCIL</u> to the effect that the conditions described in the schedule below are to be complied with on a continuing basis by the subdividing owner and any subsequent owners after the deposit of the survey plan, and is to be registered on the appropriate titles.

### **SCHEDULE**

- 1(a). Any dwelling constructed on the land described below is to utilise an effluent disposal system designed and constructed in accordance with Technical Paper 58 report as provided by Rogers and Rogers to the Far North District Council by report dated 5 May 1999.
- 1(b). The land affected by this condition is:

2.8700 hectares more or less being 1.0; 3 on Deposited Plap 202942 being part Section 153 Block IV Ahipara Survey District and part of the land formerly comprised and described in Certificate of Title Volume 119D Folio 770 (North Auckland Registry) but now the whole of the land comprised and described in Certificate of Title Volume 131A Folio 299 (North Auckland Registry).

3.0990 hectares more or less being <u>).ot 4 on Deposited Plan 202942 being</u> part Section 153 Block IV Ahipara Survey District and part of the land formerly comprised and described in Certificate of Title Volume 119D Folio 770 (North Auckland Registry) but now the whole of the land comprised and described in Certificate of Title Volume 131A Folio 300 (North Auckland Registry).

16.2234 hectares more or less being Lot 5 on Deposited Plan 202942 being part Section 153 Block IV Ahipara Survey District (reserving all minerals within the meaning of the Land Act 1924) being the residue of the land formerly comprised and described in Certificate of Title Volume 119D Folio 770 (North Auckland Registry) and Lot 1 on Deposited Plan 61704 being part Section 153 Block IV Ahipara Survey District (reserving all minerals as aforesaid) and being the whole of the land formerly comprised and described in Certificate of Title Volume 17D Folio 394 (North Auckland Registry) but now the whole of the land comprised and described in Certificate of Title Volume 131A Folio 301 (North Auckland Registry).

- 2(a). Any dwelling constructed on the land described below is to be sited outside the 150 meter building line for residential buildings as specified in the Mangonui Section of the Transitional District Plan of the Far North District Council.
- 2(b). The land affected by this condition is 16.2234 hectares more or less being Lot 5 on Deposited Plan 202942 being part Section 153 Block IV Ahipara Survey District (reserving all minerals within the meaning of the Land Act 1924) being the residue of the land formerly comprised and described in Certificate of Title Volume 119D Folio 770 (North Auckland Registry) and Lot 1 on Deposited Plan 61704 being part Section 153 Block IV Ahipara Survey District (reserving all minerals as aforesaid) and being the whole of the land formerly comprised and described in Certificate of Title Volume <u>17D Folio 394 (North Auckland Registry</u>) but now the whole of the land comprised and described in Certificate of Title Volume 131A Folio 301 (North Auckland Registry)

<u>SIGNED</u> :	By the FAR NORTH DISTRICT COUNCIL Pursuant to Section 252 of the Local Government Act 1974
DATE:	18/9/2000
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	M1,
	AIN

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221: CONSENT NOTICE

(Deposited Plan 202942 North Auckland Registry)

-







Appendix C – Site Suitability Reports



Wilton Joubert Limited 09 527 0196 185 Waipapa Road Kerikeri 0295

SITE	Lot 2 DP 366836, 1A Moa Street, Ahipara
PROJECT	Proposed 2-Lot Residential Subdivision
CLIENT	Clifford & Whetu Hau
REFERENCE NO.	130132
DOCUMENT	Geotechnical Site Suitability Report
STATUS/REVISION NO.	FINAL – Resource Consent
DATE OF ISSUE	1 November 2023

<b>Report Prepared For</b>	Email
Clifford & Whetu Hau	

Authored by	<b>N. Ngaropo</b> BSc (Geol)	Engineering Geologist	nikora@wjl.co.nz	-
Reviewed by	<b>N. Anson</b> BE(Civil), MEngNZ	Geotechnical Engineer	nick@wjl.co.nz	
Approved by	A. Asadi PhD (Geotech), CMEngNZ, CPEng	Senior Geotechnical Engineer	afshin@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.

Development Type:	Subdividing 1 Lot into 2		
District Plan Zone:	Coastal Living		
Development Proposals Supplied:	Draft Scheme Plan Prepared by Tohu Consulting Ltd titled "Cliff & Whetu Hau Subdivision – 1A Moa Street - Lot 2 DP 366836".		
Lot Sizes:	Proposed Lot 1 – 3000m² Proposed Lot 2 – 5850m²		
NZS3604 Type Structure/s:	Inferred		
Geology Encountered:	(Early Pleistocene to Middle Pleistocene) Dune Deposits		
Fill Encountered:	Fill was not encountered during our investigation.		
Overall Site Gradient in Proximity to Development:	<i>Lot 2:</i> Near level to gently sloping terrain with grades of less than 3° throughout the nominated building platform. Grades slope up between 7-9° near the eastern boundary.		
Natural Hazards:	<b>Stability:</b> Overall Low Risk of deep-seated global instability within the nominated building platform – refer to Section 8.3 for specific detail. <b>Liquefaction:</b> Refer to Section 8.4.		
Suitable Shallow Foundation Type(s):	Refer to Section 9		
Earthworks:	<b>Proposed Earthworks:</b> No earthworks proposals are currently available. However, due to the near level nature of the site, we envisage minor earthworks, being generally confined to the stripping of topsoil and/or organic sand materials, any deleterious material and the provision of foundations. Please refer to text of report for further detail.		
Shallow Soil Bearing Capacity:	Yes – Natural Soils & Engineered Fill Only Geotechnical Ultimate Bearing Capacity = 300 kPa		
NZBC B1 Expansive Soil Classification :	Class A – Non-Expansive		
NZS1170.5:2004 Site Subsoil Classification:	Class C – Shallow Soil stratigraphy		



### 2 INTRODUCTION

### 2.1 SCOPE OF WORK

Wilton Joubert Limited (WJL) were engaged by the clients, **Clifford and Whetu Hau**, to undertake a geotechnical site suitability assessment of ground conditions at the above site, in supporting a 2-Lot coastal-residential subdivision of existing Lot 2 DP 366836, as depicted to us on the supplied Draft Subdivision Scheme Plan, prepared by Tohu Consulting Ltd, titled; "*Cliff & Whetu Hau Subdivision – 1A Moa Street – Lot 2 DP 366836*" (refer Figures 1 and 2 below).

The following report provides preliminary site suitability recommendations with respect to stability and geotechnical constraints, where an indicative development area has been assessed for proposed Lot 2.

Although no development plans have been provided for the construction of a future dwelling at proposed Lot 2, a nominated 30m x 30m building platform has been identified within the proposed Lot boundaries, and hence we have assessed the suitability of the site subsoils as per our Site Plan in Figure 2 below (also attached within the appendices of this report) not only in terms of bearing capacity, but also for differential foundation movement due to soil expansivity and/or soil creep. As proposed Lot 1 contains the existing dwelling, it is excluded from any geotechnical conclusions and/or recommendations provided herein.

Furthermore, our scope does not include any environmental assessment of site soils or groundwater.

Please note, the primary purpose of this report is to support the geotechnical suitability of the proposed development in principle. This report alone should not be used to support any future Building Consent application(s) unless submitted to Council in conjunction with a Geotechnical Review Memorandum or Site-Specific Review.



Figure 1: Draft Subdivision Scheme Plan prepared by Tohu Consulting Ltd.





Figure 2: Excerpt of WJL Site Plan.

# 3 SITE DESCRIPTION

The subject site proposed for subdivision, being Lot 2 DP 366836, is located at 1A Moa Street, directly north of the intersection between Ahipara–Foreshore Road. Moa Street comes directly off Takahe Road, which is the only access point to the site from the northwestern boundary.

The 'parent Lot' is being split into 2 allotments of which, proposed Lot 2 is the subject site of this geotechnical assessment and will encompass an area of approximately 5,850m<sup>2</sup>. The existing dwelling on proposed Lot 1 is situated towards the top of a localised knoll feature, on relatively level ground. Land away from the dwelling in all directions gently drops away to the surrounding near level terrain. Proposed Lot 2 is situated on near level to gently sloping terrain of less than 3°. The current land use of the proposed Lot primarily consists of pasture cover. We assume access will be formed in the future, coinciding with the existing shared gravel driveway.

Land use of the surrounding properties is predominantly coastal residential lifestyle, with similar landform features within the neighbouring blocks.





Figure 3: Site Photo – Overlooking the Nominated Building Platform in Lot 2. Orange Cones are Indicative of the 30m x 30m Investigated Platform.



Figure 4: Site Photo – Overlooking Drainage System along Northern Boundary to the left.





Figure 5: Site Photo of Main Road Entrance – Facing East from the Takahe Road – Moa Street Intersection Overlooking the Shared Driveway further East.

At the time of preparing this report, we note that the Far North District Council (FNDC) on-line GIS Waters Map indicates that reticulated stormwater connections by way of a Double Catchpit and an inlet structure are located within the property whilst wastewater connections appear to be located nearby. Potable water connections, however, do not appear to be available to either proposed Lot.

# 4 PUBLISHED GEOLOGY

Local geology at the property is noted on the GNS Science New Zealand Geology Web Map, Scale 1:250,000, as; OIS5+ (Early Pleistocene – Middle Pleistocene) dune deposits (yellow shaded area). These deposits are described as; "Uncemented to moderately cemented and partly consolidated sand in coastal foredunes. Clay-rich sandy soils," refer; 'GNS Science Website'.

Approximately 260m+ to the northwest of the site, the local geology is mapped as; OIS1 (Holocene) active dune deposits of Karioitahi Group. These deposits are described as; "Loose sand in mobile dunes."

This may also allow for overlapping of older and younger material within the area however, due to the elevated nature of the landform and the existing dwelling being positioned some 11-12m above sea level, the material encountered within the investigated boreholes was indicative of Early to Mid-Pleistocene Dune Deposit materials.





Figure 6: Screenshot from New Zealand Geology Web Map hosted by GNS Science. Lot 2 DP 366836 highlighted in Blue.

### 5 NATURAL HAZARDS

The Northland Regional Council on-line GIS Hazard Maps indicate some flood prone land to the northwest of the parent property that is generally confined to the river outlet entering Te Oneroa-a-Tōhe (Ninety Mile Beach) along the coastline. Refer Figure 7 below. Given that the development areas, including the investigated platform within proposed Lot 2, is elevated approximately 10-11m above the mapped 100-year predicted river and coastal flood zones and well as being setback from the area (>250m). Based on this, we envisage that the flood zonation will have no impact on any future development within the nominated building platform on proposed Lot 2.



Figure 7: Screenshot from Northland Regional Council (NRC) Online GIS Showing Modelled River & Coastal Flooding Extent.



### 6 **GEOTECHNICAL INVESTIGATION**

WJL carried out a shallow ground investigation on 26 October 2023. Our subsoil testing of the proposed development involved the following:

- Three hand auger boreholes (HA) of 50mm diameter, drilled to a maximum depth of 3.0m below ground level (mbgl),
- Six DCP (Scala penetrometer) tests through the invert of each HA borehole, and from the surface to a maximum depth of 3.0mbgl,
- Three Cone Penetration Tests (CPT), to a maximum depth of around 15.0mbgl.

The approximate locations of the HAs and CPTs are shown on the appended site plan Site Plan (refer 130132-G600).

The soil sample arisings from the boreholes were logged in accordance with the "Field Description of Soil and Rock", NZGS, December 2005. In-situ undrained shear vane tests were measured at intervals of depth and then adjusted in accordance with the New Zealand Geotechnical Society (NZGS); Guidelines for Handheld Shear Vane Testing, August 2001, with strengths classified in accordance with the NZGS Field Classification Guidelines; Table 2.10, December 2005. The materials identified are described in detail on the appended records, together with the results of the various tests undertaken, plus the groundwater conditions as determined during time on site.

# 7 <u>GEOTECHNICAL FINDINGS</u>

The following is a summary of the ground conditions encountered in our investigation. Please refer to the appended logs for greater detail.

### 7.1 TOPSOIL

Topsoil with organic SAND intermixed were encountered in all hand auger boreholes to depths between 0.30m-0.70m bpgl.

# 7.2 FILLED GROUND

Fill material was not encountered within any of the investigated boreholes.

# 7.3 NATURAL GROUND

The underlying shallow natural deposits encountered on-site were consistent with our expectations of dune deposits, comprising dense to very dense fine-grained SAND with a small veneer of organic material intermixed with fine sands within the top 0.3-0.7m of the soil profile.





Figure 8: Arisings from HA01.



Figure 9: Arisings from HA02.



Figure 10: Arisings from HA03.



CPT01 encountered shallow refusal on an inferred cemented sand layer around 1.5m. As a result, CPT02-CPT03 were pre-drilled to depths of 2.0m and 2.85m respectively to bypass these cemented sand layers. The CPT Investigation encountered sand and silty sand-like soil behaviour directly below the surface soils with varying depths of around 5.29m – 15.07m before encountering a very dense layer inferred to be cemented sand, upon which CPT-01 encountered shallow refusal (as mentioned above) with tip resistance of greater than 50MPa. CPT-02 penetrated through some of the dense to very dense/hard material and eventually into material with a silty clay-like behaviour at depths ranging between 11.5m-12.5m still with a high presence of sand continued to a depth of 15.07mbgl. See Figure 11.



Figure 11 – Soil Behaviour Type with Depth from CPT Data (Not Scaled to Depth; CPT01 – 1.50mbgl; CPT02 – 15.07mbgl; CPT03 – 5.29mbgl).

# 7.4 GROUNDWATER

Groundwater was not encountered within any of the hand auger boreholes however, it was noted in HA03 that material was beginning to feel wet. Additionally, CPT02 and CPT03 encountered water to a depth of around 3.1m - 3.3m.



### 7.5 SUMMARY TABLE

The following table summarises our inferred stratigraphic profiling.

Table 1: Stratiaraphic Summar	v Table: NF=Not Encountered	UTP=Unable To Penetrate
Tuble 1. Strutigrupine Summu	y Tuble, NL=Not Encountered	

Investigation Hole ID	Topsoil / Organic Sands	Dune Sand Deposits	Ground Water Level Encountered During Drilling / Upon Completion	Reason for Borehole Termination
HA01 (2.0m drill depth)	0.0m – 0.30m	0.30m – 2.00m	NE	Too Dense To Auger
HA02 (0.8m drill depth)	0.0m – 0.70m	0.70m – 0.80m	NE	Too Dense To Auger
HA03 (3.0m drill depth)	0.0m – 0.60m	0.60m – 3.00m	NE	Target Depth

#### 8 GEOTECHNICAL ASSESSMENT

#### 8.1 SHALLOW SOIL EXPANSIVITY

Soils at the site consisted predominantly of SAND, for which shrink-swell potential is not expected.

We therefore consider the near surface soils at the property within the tested areas to be Class A (non-expansive).

#### 8.2 HISTORICAL AERIAL PHOTOGRAPHY REVIEW

A historic aerial photography review was undertaken to evaluate any slope instability features or changes in landform at the property. Aerial images from 1950 have been reviewed and compared to the present conditions around 2022.

There were no visible significant geomorphological changes in the landscape, indicating a period of stable ground conditions between 1950 and 2022 as shown in Figures 12-13 below.

No obvious features consistent with major ground instability or major topographical changes were observed within the subject site between 1950 and 2022.



Figure 12: Historical Image Overlooking Property in 1950. Source: RetroLens – Historical Image Resource





Figure 13: Image of Property in 2022. Source: Google Earth Pro

# 8.3 SITE STABILITY

The land across the proposed building platform is generally level to gently sloping. No significant slopes, nor any sign of slope instability was observed within proximity of the subject site.

Any stormwater overland flow paths within close proximity of nominated building platform will need to be diverted away from any future dwelling location, as well as from any ancillary structures, such as sheds, minor dwellings, wastewater disposal fields etc. All stormwater run-off, both pre- and post-development works at the proposed Lot will need to be appropriately managed and controlled on-site and discharged to a stable disposal point.

We consider the risk of moderate to deep-seated slope instability impacting the development of this building site to be significantly low on the basis of:

- No obvious evidence of global instability at or near the subject site,
- There are no known active faults that traverse through or close to the site,
- Relatively high in-situ measured DCP-Scala penetrometer results showing generally dense to very dense granular material,
- The lack of definite steep slopes within proximity to the nominated building platform,

In the long-term, provided that all of the recommendations within this report, or subsequent revisions, are adhered to, then we do not anticipate any significant risk of instability either within, or immediately beyond, the proposed building site.

# 8.4 LIQUEFACTION HAZARD ASSESSMENT

Liquefaction is a phenomenon where the effective strength of a cohesionless soil, typically sand, is lost due to pore-water pressures generated during a seismic event such as an earthquake. This can result in vertical settlement and/or horizontal movement (lateral spreading) of the ground. It is important to note that changes in groundwater levels due to increases or decreases in rainfall, which may be influenced by climate change, could also affect the occurrence of liquefaction. However, predicting the magnitude of such changes is difficult due to the uncertainties associated with climate change.

In accordance with <u>Canterbury Residential Technical Guidance - Part D: Subdivisions</u>, the assessment of liquefaction characteristics involves evaluating the entire soil profile. Settlement calculations typically focus





on the upper 10 meters for comparison with Table 16.1's index values. However, it is important to note that potential issues below 10 meters should still be considered.

# 8.4.1 Liquefaction Susceptibility Assessment

A commonly accepted definition is: "Areas susceptible to liquefaction generally correspond with geologically young deposits (less than 10,000 years) located in relatively flat areas close to active or abandoned waterways, in coastal or estuarine areas, and/or areas of uncompacted or poorly compacted fill". None of these characteristics apply to this site.

A screening procedure based on geological criteria was adopted to examine whether the subject site might be susceptible to liquefaction, as follows:

- There are no known active faults traversing through the property,
- There is no historical evidence of liquefaction at this location,
- The site is low-lying and there is shallow groundwater (~3.5mbgl),
- Generally Dense to very Dense sandy soils were encountered during our field investigation over the upper 3.0m of the soil profile,
- The subsoils at the building site are Early to Mid-Pleistocene Dune deposits, which are geologically young being some 1.79million to 128,000 years of age.
- Based on section 5.2 "Assessment of Liquefaction susceptibility" of Module 3 MIBE guidance for building performance, liquefaction susceptibility may be evaluated using the soil behaviour type index (Ic) calculated form the CPT data, where soils have a Ic <2.6 they are susceptible to liquefaction. The Ic numbers for CPT01-02 indicate liquefaction susceptibility at this site as shown in Figure 14 below:



Figure 14. Soil behaviour type index, Ic.



• Furthermore, the FNDC GIS maps shows the subject property to be in close proximity to land that is zoned with "possible" Liquefaction Vulnerability classification:



Figure 15 – Screenshot of the FNDC GIS Liquefaction Vulnerability Map.

Based on the above, we conclude that the soils at the proposed building sites have a risk of liquefaction susceptibility above a depth of around 6.5-7mbgl and liquefaction damage is therefore possible.

# 8.4.2 Liquefaction Triggering Assessment

Assessment of liquefaction induced free field settlement at the site has been carried out in general accordance with MBIE guidelines and using specialised software 'Cliq 3.0' developed by Geologismiki Limited.

Liquefaction assessments were carried out using the Boulanger & Idriss (2014) method and the Zhang et al (2002) procedure to determine possible liquefaction induced ground subsidence across the site following a future large earthquake event.

The analysis has been performed using the onsite CPT data (CPT01 - CPT03), with a conservative groundwater level of 2.5m during a seismic event for CPT01 and 2.7m for CPT02-CPT03.

Table 2 presents the recommended values for peak ground acceleration and earthquake magnitude in geotechnical assessment, as outlined in <u>Module 1 of the guidelines for Earthquake Geotechnical Engineering</u> <u>Practice, updated in November 2021</u>.

Location	25-year return period SLS		500-year return period ULS & ULS*	
	a <sub>max</sub>	М	a <sub>max</sub>	м
Northland	0.03	5.8	0.13	5.8
Northland	0.05 5.8		(0.19)	(6.5)

Table 2: Design Earthquake Scenarios

Table 2 Note: a<sub>max</sub> = Peak Ground Acceleration, M = Earthquake Magnitude, ULS\* = based on the lower bound ULS load requirements stipulated in NZTA Bridge



### 8.4.3 Results:

### Liquefaction Induced Settlements

Figures 16 to 18 present the calculated values for overall free field vertical settlements, liquefaction potential Index and overall liquefaction severity number for each of the CPT investigations under SLS, ULS and ULS\* events.

The figures demonstrate that there is no occurrence of free field induced settlement during the SLS event. However, settlements up to 5mm are projected for the ULS event, and settlements up to 55mm are anticipated for the ULS\* event. Liquefaction analysis was limited to the top 10m of the soil profile for the purposes of the specification of foundation options due to material below this having little likely impact on the surface for a light residential dwelling with shallow foundations.

	a <sub>max</sub>	Magnitude	Potential Liquefaction Induced Free-field Settlement (mm)		
			CPT-01	CPT-02	CPT-03
SLS	0.03g	5.8	0	0	0
ULS	0.13g	5.8	0	<5	0
ULS*	0.19g	6.5	0	55	0

 Table 3: Predicted Potential Liquefaction Induced Free-field Settlements following SLS, ULS and ULS\* Design

 Earthquake Events. (Displayed Settlements rounded up to the nearest 5mm)

From the results of the liquefaction analysis, it is noted that the majority of predicated settlements are developing around 6.5m below ground level, with little predicted settlement outside of this range. It is also noted that a thick crust of 5-6m above this layer recorded a relatively high cone resistance result. This is true even for the higher order shaking of the collapse avoidance case (ULS\*). See appended liquefaction analysis results.



*Figure 16 – Overall Predicted Earthquake-induced Free-field Settlements (Analysis Limited to top 10m).* 



#### 1A Moa Street, Ahipara

# Liquefaction Potential Index

Liquefaction Potential Index (LPI) is a measure of the vulnerability of sites to liquefaction effects. LPI is the summation of liquefaction severity in each soil layer, which in turn is a function of the Factor of Safety for liquefaction triggering (FoS), weighted by a depth factor that decreases linearly from 10 to 0 over the top 20 m of a soil profile.

The calculated Liquefaction Potential Index (LPI) for each of the CPT test locations was zero for both SLS and ULS level events, confirming the previous subjective assessment that there is a low risk of liquefaction. The Collapse Avoidance Limit State, although a much larger modelled earthquake, resulted in a LPI of less than 5, indicating low risk of liquefaction potential.



Figure 17 – Overall Liquefaction Potential Index (LPI).

# Liquefaction Severity Number

The Liquefaction Severity Number (LSN) is a depth weighted assessment methodology, which produces a dimensionless number to assess vulnerability of land to liquefaction-induced damage, and was developed to address some shortcomings in the LPI ratings, by comparing measured attributes from the properties damaged by the Canterbury Earthquake sequence, with parameters calculated from approximately 7,500 Cone Penetration Tests (CPT).

Similarly, the calculated Liquefaction Severity Number (LPN) was zero or near zero for each of the CPT test locations under SLS and ULS level events and furthermore, predicts little to no expression of liquefaction at the surface following future ULS and ULS\* events.







Figure 18 – Overall Liquefaction Severity Number (LSN).

We conducted a parametric analysis to examine the post-liquefaction effects under a more demanding load condition as outlined in MODULE 1: Overview of the guidelines for Earthquake Geotechnical Engineering Practice (November 2021). Please refer to page 26 for hazard estimates pertaining to Method 1 in the Auckland and Northland regions.

Figure 19 displays the settlement results when ground acceleration exceeds 0.13 during the liquefaction triggering analysis.



Figure 19 – Parametric analysis



# 8.4.4 Liquefaction Assessment Conclusions:

Our assessment leads to the following conclusions: the site exhibits characteristics of a TC1 site under SLS load, TC1 under ULS event with a ground acceleration of 0.13g, and TC2 when ground acceleration exceeds 0.15g, as determined through the parametric analysis.

Additionally, it is noted that the calculated settlements are predicted to largely be confined to a layer between 6.5 - 7.0mbgl. Considering the solid crust evident by the shallow refusal and very high cone resistance, and the absence of significant predicted settlements above this depth, these settlements are unlikely to have a damaging impact to structures at the surface within proximity of the CPT investigation locations.

# 9 CONCLUSIONS AND RECOMMENDATIONS

Based on our fieldwork investigation, subsoil testing results, walkover inspection and stability commentary as described above, we consider on reasonable grounds that this report can be submitted to the Territorial Authority in support of a Resource Consent application for subdividing the subject site, substantiating that in terms of section 106 of the Resource Management Act and its current amendments, either

a) No land in respect of which the consent is sought, nor any structure on that land, is, nor is likely to be subject to material damage by erosion, falling debris, subsidence, slippage, or inundation from any source;

or,

b) No subsequent use that is likely to be made of the land is likely to accelerate, worsen, or result in material damage to that land, other land, or structure, by erosion, falling debris, subsidence, slippage, or inundation from any source-

unless the Territorial Authority is satisfied that sufficient provision has been made or will be made in accordance with section 106(2).

Under section 106(2), the Territorial Authority may grant a subdivision consent if it is satisfied that the effects described above will be avoided, remedied, or mitigated by one or more of the following:

- (a) Rules in the district plan:
- (b) Conditions of a resource consent, either generally or pursuant to section 220(1)(d):
- (c) Other matters, including works.

And we are therefore satisfied that the proposed Lot 2 should be generally suitable for building development in terms of NZS3604:2011, provided an appropriate site-specific geotechnical assessment be undertaken to support a future Building Consent application for proposed Lot 2, once final land modification proposals have been devised, adhering to the following recommendations of this report, unless over-ridden by said site-specific geotechnical assessment.



# 9.1 FOUNDATION DESIGN

We have classified the site as exhibiting TC1-like characteristics under SLS event and ULS event with ground acceleration of up to 0.15g, and as a result, liquefaction damage is unlikely in a future large earthquake up to the 0.15g ground acceleration.

Nevertheless, it should be noted that if the ground acceleration exceeds 0.15g, we will expect the settlements exceed TC1 characterisation.

The near surface soils at the property are considered to be Class A (non-expansive) soils.

### Our recommended foundation solution for these structures given the above conclusions is as follows:

- NZS3604 Concrete Slab on grade with deepened perimeter footings minimum foundation embedment 400mm below cleared ground level.
- Conventional NZS3604 Piles to a minimum depth of 0.7mbgl, and/or a minimum of 0.3m into stiff/dense natural material, whichever is deeper.
- It is also recommended to enhance both the structural design and stiffness of the aforementioned foundation system to bolster its capacity to withstand potential liquefaction-related consequences (i.e., settlements under ULS\*), as outlined in the Earthquake Design for Uncertainty Advisory (Revision 1, August 2022), and in accordance with the Canterbury residential technical guidance Parts A to D.

When finalising the development proposals, it should be checked that all foundations lie outside 45° envelopes rising up from:

- 0.50 metres below the invert of service trenches, and/or
- the toe of adjacent retaining walls,

unless such foundation details are found by specific design, to be satisfactory. For any surcharging foundations, deeper foundation embedment's with piles may be required.

During inspections post-obtaining Building Consent, it is important to exercise caution to verify that the natural ground meets the recommended bearing capacity mentioned in this report and any subsequent geotechnical report specifically addressing the future development within the nominated building platform. This is crucial for preserving stability and structural integrity.

# 9.2 NZS1170.5:2004 SITE SUBSOIL CLASSIFICATION

We consider the nominated building platform to be underlain with a Class C – Shallow Soil Site.

# 9.3 SITE EARTHWORKS

Further earthworks operations are not anticipated for the proposed development.

However, should that change, then all earthworks should be undertaken in accordance with the following standards:

All earthworks should be undertaken in accordance with the following standards:

- NZS4431:2022 "Code of Practice for Earth Fill Residential Development",
- Section 2 "Earthworks & Geotechnical Requirements" of NZS4404:2010 "Land Development and Subdivision Infrastructure", and
- Chapter 2 "Site Development Suitability (Geotechnical and Natural Hazards" of the Far North District Council Engineering Standards, (Version 0.6 issued May 2023).

Imported hardfill (GAP 40 recommended or granular base complying with NZS3604, cl7.5.3) and compacted in accordance with NZS:4431 should be utilised for all fills beneath future building footprints, which should extend a minimum of 1.0m beyond the edge of the raft slab foundation system.

The compaction of the hardfill should be undertaken using either a heavy plate compactor or a steel wheeled roller with low frequency dynamic compaction.



We recommend achieving the following compacted target values, with equivalence testing using either a Clegg Impact Hammer or DCP-Scala Penetrometer:

Foundation Support Type	CBR	Equivalent Clegg Impact Value (CIV)	Equivalent DCP-Scala Penetrometer Blows
Foundation Footings & Beams (Over a depth of no less than twice the foundation width)	≥ 10%	Minimum 15 Average 18	≥5 blows/100mm. (NZS3604)
Floor Slabs	≥ 7%	Minimum 12 Average 15	≥3.5 blows/100mm (NZS3604)

**Table 4: Hardfill Compaction Specifications** 

### 9.3.1 SITE CLEARANCE

Competency of the exposed subgrade underlying all future foundations and structures should be confirmed by a Geo-Professional. In this regard, we recommend the stripping of all vegetation, topsoil as well as any non-engineered fill deposits prior to requesting Geo-Professional inspection(s) of the stripped ground to confirm that the underlying natural subgrade conditions are in keeping with the expectations of this report.

Without such inspections being undertaken, a Chartered Professional Geotechnical Engineer is unable to issue a Producer Statement - PS4 – Design Review which could result in the failure to meet Building Consent requirements as set by Council as conditions of consent.

Additionally, it is recommended that All topsoil, existing non-engineered fill, buried topsoil, and organic-rich material deemed to be unsuitable for any future foundations should be stripped first from any areas beyond the cut platform prior to the placement of landscaping fill.

### 9.3.2 SUBGRADE PROTECTION

The subgrade, where exposed, should not be exposed for any prolonged period but should be covered with as a minimum, a 100mm thick layer of granular fill such as GAP40 basecourse, as soon as possible.

Likewise, pile/pier inverts should be poured as soon as possible once inspected by a Geo-Professional or covered with a protective layer of site concrete.

# 9.3.3 TEMPORARY & LONG-TERM EARTHWORKS

It is imperative that all earthworks are undertaken both during the summer period of the year and prolonged forecast dry weather conditions.

During times of inclement weather, earthwork sites should be shaped to assist in stormwater run-off. Any batter excavations should be protected with a geotextile fabric with the toe of the excavations shaped so as to avoid ponded water, as saturating site soils could result in a reduction of bearing capacities.

Temporary stormwater diversion must be constructed around the upslope perimeter of bulk excavations to direct overland flows away from excavations. This could take the form of a soil bund or other measures as deemed appropriate by the supervising Geo-Professional.

All cuts should be limited to a maximum vertical height of 1.0m without review and approval by a Geo-Professional and should be battered back at gradients no steeper than 1V:3H as well as being appropriately dressed and planted. An appropriate cut-off drain should be installed above all cuts.

All fills should be limited to a maximum vertical height of 0.30m without review and approval by a Geo-Professional and should be battered back at gradients no steeper than 1V:4H.

Finally, any exposed batters should be covered with topsoil or geotextile before being re-grassed and/or planted as soon as practicable.

THOROUGH ANALYSIS AND DEPENDABLE ADVICE GEOTECHNICAL • STRUCTURAL • CIVIL



#### 1A Moa Street, Ahipara

# 9.3.4 GENERAL SITE WORKS

We stress that any and all works should be undertaken in a careful and safe manner so that Health & Safety is not compromised, and that suitable Erosion & Sediment control measures should be put in place. Any stockpiles placed should be done so in an appropriate manner so that land stability and/or adjacent structures are not compromised.

Furthermore:

- All works must be undertaken in accordance with the Health and Safety at Work Act 2015,
- Any open excavations should be fenced off or covered, and/or access restricted as appropriate,
- The location of all services (if any) should be verified at the site prior to the commencement of construction,
- The Contractor is responsible at all times for ensuring that all necessary precautions are taken to protect all aspects of the works, as well as adjacent properties, buildings and services, and
- Should the contractor require any site-specific assistance with safe construction methodologies, please contact WJL for further assistance.

# 9.4 STORMWATER & SURFACE WATER CONTROL

Uncontrolled stormwater flows must not be allowed to run onto or over site slopes, or to saturate the ground, so as to adversely affect slope stability or foundation conditions.

Overland flows and similar runoff such as from any higher ground should be intercepted by means of shallow surface drains and/or small bunds and be directed away from building footprints to protect building platforms from both saturation and erosion. Water collected in interceptor drains should be diverted away from building sites to appropriate disposal points. All stormwater runoff from roofs and paved areas, should be collected in sealed pipes and be discharged to a stable disposal point that is not directly downslope of any future structure.

Under no circumstances should concentrated overflows from any source discharge into or onto the ground in an <u>uncontrolled</u> fashion.

# 10 UNDERGROUND SERVICES

Although Far North District Council (FNDC) GIS Maps do not indicate any public underground services (i.e., stormwater, wastewater lines) to be present within and closely nearby the nominated building platform, other underground services, public or private, mapped, or unmapped, of any type could be present. It is recommended to stay on the side of caution during the commencement of any future works within the proposed development area.



### 11 LIMITATIONS

We anticipate that this report is to be submitted to Council in support of a Resource Consent application.

This report has been commissioned solely for the benefit of our client, the **Clifford & Whetu Hau**, in relation to the project as described herein, and to the limits of our engagement, with the exception that the local Territorial Authority may rely on it to the extent of its appropriateness, conditions, and limitations, when issuing the subject consent.

Any variations from the development proposals as described herein as forming the basis of our appraisal should be referred back to us for further evaluation. Copyright of Intellectual Property remains with Wilton Joubert Limited, and this report may NOT be used by any other entity, or for any other proposals, without our written consent. Therefore, no liability is accepted by this firm or any of its directors, servants, or agents, in respect of any other geotechnical aspects of this site, nor for its use by any other person or entity, and any other person or entity who relies upon any information contained herein does so entirely at their own risk. Where other parties may wish to rely on it, whether for the same or different proposals, this permission may be extended, subject to our satisfactory review of their interpretation of the report.

Although this report may be submitted to a local authority in connection with an application for a consent, permission, approval, or pursuant to any other requirement of law, this disclaimer shall still apply and require all other parties to use due diligence where necessary and does not remove the necessity for the normal inspection of site conditions and the design of foundations as would be made under all normal circumstances.

Thank you for the opportunity to provide our service on this project, and if we can be of further assistance, please do not hesitate to contact us.

Yours faithfully,

# WILTON JOUBERT LIMITED

### **Enclosures:**

- Draft Scheme Plan (1 sheet)
- Site Plan & Cross-Section A-A' (2 sheets)
- Hand Auger Borehole Records (4 sheets)
- DCP-Scala Summary (1 sheet)
- CPT Liquefaction Analysis Results (27 sheets)





Cliff & Whetu Hau Subdivision – 1A Moa Street - Lot 2 DP 366836



Con	isuiting Eng
Northland: 09 945 4188	Auckland: 09
Christchurch: 021 824 063	Wanaka: 03
www.wiltonjo	oubert.co.nz



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# SCALA PENETROMETER LOG SHEET



Office: Address: Email: Phone: Website: Kerikeri (Far North) 185 Waipapa Road, Kerikeri, 0230 jobs@wjl.co.nz 09 945 4188 https://www.wiltonjoubert.co.nz/

CLIENT: **Clifford & Whetu Hau** DATE: 26/10/2023 JOB NO. 130132

Lot 2 DP 366836 - 1A Moa Street, Ahipara **METHOD: DCP-Scala Penetrometer** 

LOGGED BY:	NPN			
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PAGE:	1 of 1			

0.6m

NZGS Definition of

Relative

Density for

Coarse Grained Soils V. Loose

Loose

Loose

Medium

Dense V. Dense

	DCP01			DCP02		DCP03	
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SITE:

GeoLogismiki



Geotechnical Engineers Merarhias 56

http://www.geologismiki.gr

LIQUEFACTION ANALYSIS REPORT

### Project title : Geotechnical Suitability Assessment

#### Location : 1A Moa Street, Ahipara




CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:10 pm Project file: 0.05

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Liquefaction analysis overall plots

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### CPT name: CPT01 SLS



**CPT file : CPT01 ULS** 

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LIQUEFACTION ANALYSIS REPORT

### Project title : Geotechnical Suitability Assessment

### Location : 1A Moa Street, Ahipara

### Input parameters and analysis data Clay like behavior Analysis method: B&I (2014) G.W.T. (in-situ): 3.00 m Use fill: No Fines correction method: B&I (2014) G.W.T. (earthq.): 2.50 m Fill height: N/A applied: Sands only Points to test: Based on Ic value Average results interval: 3 Fill weight: N/A Limit depth applied: Yes Earthquake magnitude M<sub>w</sub>: 5.80 Ic cut-off value: 2.60 Trans. detect. applied: No Limit depth: 10.00 m Peak ground acceleration: 0.13 Unit weight calculation: Based on SBT $K_{\sigma}$ applied: MSF method: Method Yes SBTn Plot **CRR** plot FS Plot **Cone resistance Friction Ratio** 0.05 0.05 0.05 0.05 0.05-0.1 0.1 0.1 0.1 0.1 0.15 0.15 0.15 0.15 0.15-0.2 0.2 0.2 -0.2 0.2 0.25 0.25 0.25 0.25 0.25 0.3 0.3 0.3 0.3 0.3 0.35 0.35 0.35 0.35 0.35 0.4 0.4 0.4 0.4 0.4 0.45 0.45 0.45 0.45 0.45 0.5 0.5 0.5 0.5 0.5 0.55 0.55 0.55 0.55 0.55 0.6 0.6 0.6 0.6 0.6 0.65 0.65 0.65 0.65 0.65 Depth (m) 0.7 0.7 0.7 0.7 0.7 0.75 0.75 0.75 0.75 0.75 0.8 0.8 0.8 0.8 0.8 -0.85 0.85 0.85 0.85 0.85 0.9 0.9 0.9 0.9 0.9 0.95 0.95 0.95 0.95 0.95-1 1 1 1 1 1.05 1.05 1.05 1.05 1.05 1.11.1 1.1 $1.1 \cdot$ 1.1 -1.15 1.15 1.15 1.15 1.15 1.2 1.2 1.2 1.2 1.2 1.25 1.25-1.25 1.25-1.25-1.3 1.3 1.3 1.3 1.3 1.35 1.35 1.35 1.35 1.35 1.4 1.4 1.4 1.4 1.4 -1.45 1.45 1.45 1.45 1.45 0.2 0.4 CRR & CSR 0.5 1.5 0 20 40 60 0 2 4 6 8 10 2 3 0 0.6 0 1 2 Rf (%) qt (MPa) Ic (Robertson 1990) Factor of safety $M_w = 7^{1/2}$ , sigma'=1 atm base curve Summary of liquefaction potential 0.8 1,000 Liquefaction 8 Normalized CPT penetration resistance 0.7 9 0.6 100 Cyclic Stress Ratio\* (CSR\*) 0.5 0.4 10 -0.3 0.2 1 0.1 10 Normalized friction ratio (%) 0.1 Zone A1: Cyclic liquefaction likely depending on size and duration of cyclic loading Zone A<sub>2</sub>: Cyclic liquefaction and strength loss likely depending on loading and ground No Liquefaction geometry 0 Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening 0 20 40 60 80 100 120 140 160 180 200 Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity.

CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:11 pm Project file:

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brittleness/sensitivity, strain to peak undrained strength and ground geometry



CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:11 pm Project file:



CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:11 pm Project file:



**CPT file : CPT01 ULS\*** 

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## LIQUEFACTION ANALYSIS REPORT

### Project title : Geotechnical Suitability Assessment

### Location : 1A Moa Street, Ahipara

### Input parameters and analysis data Clay like behavior Analysis method: B&I (2014) G.W.T. (in-situ): 3.00 m Use fill: No Fines correction method: B&I (2014) G.W.T. (earthq.): 2.50 m Fill height: N/A applied: Sands only Points to test: Based on Ic value Average results interval: 3 Fill weight: N/A Limit depth applied: Yes Earthquake magnitude M<sub>w</sub>: 6.50 Ic cut-off value: 2.60 Trans. detect. applied: No Limit depth: 10.00 m Peak ground acceleration: 0.19 Unit weight calculation: Based on SBT $K_{\sigma}$ applied: MSF method: Method Yes SBTn Plot **CRR** plot FS Plot **Cone resistance Friction Ratio** 0.05 0.05 0.05 0.05 0.05-0.1 0.1 0.1 0.1 0.1 0.15 0.15 0.15 0.15 0.15-0.2 0.2 0.2 -0.2 0.2 0.25 0.25 0.25 0.25 0.25 0.3 0.3 0.3 0.3 0.3 0.35 0.35 0.35 0.35 0.35 0.4 0.4 0.4 0.4 0.4 0.45 0.45 0.45 0.45 0.45 0.5 0.5 0.5 0.5 0.5 0.55 0.55 0.55 0.55 0.55 0.6 0.6 0.6 0.6 0.6 0.65 0.65 0.65 0.65 0.65 Depth (m) 0.7 0.7 0.7 0.7 0.7 0.75 0.75 0.75 0.75 0.75 0.8 0.8 0.8 0.8 0.8 -0.85 0.85 0.85 0.85 0.85 0.9 0.9 0.9 0.9 0.9 0.95 0.95 0.95 0.95 0.95-1 1 1 1 1 1.05 1.05 1.05 1.05 1.05 1.11.1 1.1 1.1 1.1 -1.15 1.15 1.15 1.15 1.15 1.2 1.2 1.2 1.2 1.2 1.25 1.25-1.25 1.25 1.25-1.3 1.3 1.3 1.3 1.3 1.35 1.35 1.35 1.35 1.35 1.4 1.4 1.4 1.4 1.4 -1.45 1.45 1.45 1.45 1.45 0.2 0.4 CRR & CSR 0.5 1.5 0 20 40 60 0 2 4 6 8 10 2 3 0 0.6 0 1 2 Rf (%) qt (MPa) Ic (Robertson 1990) Factor of safety $M_w = 7^{1/2}$ , sigma'=1 atm base curve Summary of liquefaction potential 0.8 1,000 Liquefaction 8 Normalized CPT penetration resistance 0.7 9 0.6 100 Cyclic Stress Ratio\* (CSR\*) 0.5 0.4 10 -0.3 0.2 1 0.1 10 Normalized friction ratio (%) 0.1 Zone A1: Cyclic liquefaction likely depending on size and duration of cyclic loading Zone A<sub>2</sub>: Cyclic liquefaction and strength loss likely depending on loading and ground No Liquefaction geometry 0 Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening 0 20 40 60 80 100 120 140 160 180 200 Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity. qc1N,cs brittleness/sensitivity, strain to peak undrained strength and ground geometry



CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:11 pm Project file:

Depth to water table (insitu): 3.00 m



### **CRR** plot FS Plot Liquefaction potential Vertical settlements Lateral displacements 0.05 0.05-0.05-0.05-0.05 0.1 -0.1-0.1 0.1 0.1-0.15 0.15-0.15 0.15-0.15 0.2 -0.2 -0.2 0.2-0.2 0.25 0.25-0.25 0.25 0.25-0.3-0.3 0.3 0.3-0.3 0.35-0.35-0.35 0.35 0.35-0.4 0.4-0.4 0.4-0.4 0.45-0.45-0.45 0.45-0.45 0.5 0.5-0.5 0.5-0.5 0.55-0.55-0.55-0.55 0.55-0.6-0.6-0.6 0.6-0.6 0.65-0.65 0.65-0.65 0.65 Depth (m) 0.75 Ê 0.7 Ξ E E 0.7-0.7 0.7 0.75-0.8-Depth () 0.75-Depth ( Depth 0.75-0.75 0.8-0.8 0.85 0.85-0.85 0.85-0.85 0.9 0.9-0.9 0.9-0.9 0.95 0.95-0.95 0.95-0.95 1 1 -1. 1 -1 1.05 1.05-1.05-1.05-1.05 1.11.1 -1.11.1 -1.1 1.15 1.15-1.15 1.15-1.15 1.2 -1.2 1.2 1.2 -1.2 1.25 1.25-1.25 1.25-1.25 1.3 1.3-1.3 1.3-1.3 1.35 1.35 1.35-1.35-1.35 1.4-1.4 1.4 1.4-1.4 1.45-1.45 1.45 1.45-1.45 0 0.2 0.4 0.6 0 15 0.5 1 1.5 2 0 5 10 20 0 CRR & CSR LPI Settlement (cm) Factor of safety Displacement (cm) F.S. color scheme LPI color scheme Input parameters and analysis data Almost certain it will liquefy B&I (2014) Very high risk Analysis method: Depth to GWT (erthq.): 2.50 m Fill weight: N/A Fines correction method: B&I (2014) Average results interval: 3 Transition detect. applied: No Very likely to liquefy High risk Based on Ic value Ic cut-off value: $K_{\alpha}$ applied: Points to test: 2.60 Yes Liquefaction and no liq. are equally likely Low risk Unit weight calculation: Based on SBT Clay like behavior applied: Sands only Earthquake magnitude M<sub>w</sub>: 6.50 Unlike to liquefy Peak ground acceleration: 0.19 Use fill: No Limit depth applied: Yes

Liquefaction analysis overall plots

CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:11 pm Project file:

Fill height:

N/A

Limit depth:

10.00 m

Almost certain it will not liquefy



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LIQUEFACTION ANALYSIS REPORT

### Project title : Geotechnical Suitability Assessment

### Location : 1A Moa Street, Ahipara





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### Project title : Geotechnical Suitability Assessment

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CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:13 pm Project file:



**CPT file : CPT03 SLS** 

0.1

0

0

20

40

60

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LIQUEFACTION ANALYSIS REPORT

### **Project title : Geotechnical Suitability Assessment**

### Location : 1A Moa Street, Ahipara

### Input parameters and analysis data Clay like behavior Analysis method: B&I (2014) G.W.T. (in-situ): 2.85 m Use fill: No Fines correction method: B&I (2014) G.W.T. (earthq.): 2.50 m Fill height: N/A applied: Points to test: Based on Ic value Average results interval: 3 Fill weight: N/A Limit depth applied: Earthquake magnitude M<sub>w</sub>: 5.80 Ic cut-off value: 2.60 Trans. detect. applied: No Limit depth: Peak ground acceleration: 0.03 Unit weight calculation: Based on SBT $K_{\sigma}$ applied: MSF method: Yes **SBTn Plot CRR** plot **FS Plot Cone resistance** Friction Ratio 0 0 0 2.9 2.9 0.2 0.2 0.2 3 3 0.4 0.4 0.4 3.1 3.1 0.6 0.6 0.6 3.2 3.2 0.8 0.8 0.8 3.3 3.3 1 1 1 3.4 3.4 1.2 1.2 1.2 3.5 3.5 1.4 1.4 1.4 1.6 1.6 1.6 3.6 3.6 1.8 1.8 1.8 3.7 3.7 2 2 2 3.8 3.8 2.2 2.2 2.2 3.9 3.9 (m) 3.9 4 4.1 4.1 24 2.4 2.4 4 2.6 2.6 2.6 4.1 DRILL OUT DRILL OUT DRILL OUT 2.8 2.8 2.8 4.2 4.2 3 3 3 4.3 4.3 3.2 3.2 3.2 4.4 4.4 3.4 3.4 3.4 4.5 4.5 3.6 3.6 3.6 4.6 4.6 3.8 3.8 3.8 4.7 4 4 4 4.7 4.8 4.2 4.2 4.2 4.8 4.4 4.4 4.4 4.9 4.9 4.6 4.6 4.6 5 5 4.8 4.8 4.8 5.1 5.1 5 5 5 5.2 5.2 5.2 5.2 5.2 0 20 40 0 2 6 8 10 2 3 0 0.2 0.4 0.6 0 0.5 4 qt (MPa) Ic (Robertson 1990) CRR & CSR Rf (%) Factor of safety $M_w = 7^{1/2}$ , sigma'=1 atm base curve Summary of liquefaction potential 0.8 1,000 Liquefaction 8 Normalized CPT penetration resistance 0.7 0.6 100 Cyclic Stress Ratio\* (CSR\*) 0.5 0.4 10 0.3 0.2 1 -

0.1 10 Normalized friction ratio (%) Zone A1: Cyclic liquefaction likely depending on size and duration of cyclic loading Zone A<sub>2</sub>: Cyclic liquefaction and strength loss likely depending on loading and ground

geometry Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity. brittleness/sensitivity, strain to peak undrained strength and ground geometry



00000

120

140

100

qc1N,cs

80

**Vo Liquefaction** 

180

200

160

Sands only

No

N/A

Method

1.5

9

2



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**CPT file : CPT03 ULS** 

0

0

20

40

60

80

100

qc1N,cs

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LIQUEFACTION ANALYSIS REPORT

### **Project title : Geotechnical Suitability Assessment**

### Location : 1A Moa Street, Ahipara

### Input parameters and analysis data Clay like behavior G.W.T. (in-situ): G.W.T. (earthq.): Analysis method: B&I (2014) 2.85 m Use fill: No Fines correction method: B&I (2014) 2.50 m Fill height: N/A applied: Points to test: Based on Ic value Average results interval: 3 Fill weight: N/A Limit depth applied: Earthquake magnitude M<sub>w</sub>: 5.80 Ic cut-off value: 2.60 Trans. detect. applied: No Limit depth: Peak ground acceleration: 0.13 Unit weight calculation: Based on SBT $K_{\sigma}$ applied: MSF method: Yes **SBTn Plot CRR** plot **FS Plot Cone resistance** Friction Ratio 0 0 0 2.9 2.9 0.2 0.2 0.2 3 3 0.4 0.4 0.4 3.1 3.1 0.6 0.6 0.6 3.2 3.2 0.8 0.8 0.8 3.3 3.3 1 1 1 3.4 3.4 1.2 1.2 1.2 3.5 3.5 1.4 1.4 1.4 1.6 1.6 1.6 3.6 3.6 1.8 1.8 1.8 3.7 3.7 2 2 2 3.8 3.8 2.2 2.2 2.2 3.9 3.9 (m) 3.9 4 4.1 4.1 24 2.4 2.4 4 2.6 2.6 2.6 4.1 DRILL OUT DRILL OUT DRILL OUT 2.8 2.8 2.8 4.2 4.2 3 3 3 4.3 4.3 3.2 3.2 3.2 4.4 4.4 3.4 3.4 3.4 4.5 4.5 3.6 3.6 3.6 4.6 4.6 3.8 3.8 3.8 4.7 4 4 4 4.7 4.8 4.2 4.2 4.2 4.8 4.4 4.4 4.4 4.9 4.9 4.6 4.6 4.6 5 5 4.8 4.8 4.8 5.1 5.15 5 5 5.2 5.2 5.2 5.2 5.2 0 20 40 0 2 6 8 10 2 3 0 0.2 0.4 0.6 0 0.5 4 qt (MPa) Rf (%) CRR & CSR Ic (Robertson 1990) Factor of safety $M_w = 7^{1/2}$ , sigma'=1 atm base curve Summary of liquefaction potential 0.8 1,000 Liquefaction 8 Normalized CPT penetration resistance 0.7 0.6 100 Cyclic Stress Ratio\* (CSR\*) 0.5 0.4 10 0.3 0.2 1 -0.1 Normalized friction ratio (%) 0.1 Zone A1: Cyclic liquefaction likely depending on size and duration of cyclic loading No Liquefaction

Zone A<sub>2</sub>: Cyclic liquefaction and strength loss likely depending on loading and ground geometry

Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity. brittleness/sensitivity, strain to peak undrained strength and ground geometry

120

140

160

180

200

10

Sands only

No

N/A

Method

1.5

9

2



N/A

3. Clay to silty clay

6. Clean sand to silty sand

# Peak ground acceleration:0.13Use fill:NoLimit depth applied:Depth to water table (insitu):2.85 mFill height:N/ALimit depth:

CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:14 pm Project file:

9. Very stiff fine grained

CPT basic interpretation plots



CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:14 pm Project file:



**CPT file : CPT03 ULS\*** 

0

0

20

40

60

80

100

qc1N,cs

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LIQUEFACTION ANALYSIS REPORT

### **Project title : Geotechnical Suitability Assessment**

### Location : 1A Moa Street, Ahipara

### Input parameters and analysis data Clay like behavior Analysis method: B&I (2014) G.W.T. (in-situ): 2.85 m Use fill: No Fines correction method: B&I (2014) G.W.T. (earthq.): 2.50 m Fill height: N/A applied: Points to test: Based on Ic value Average results interval: 3 Fill weight: N/A Limit depth applied: Earthquake magnitude M<sub>w</sub>: 6.50 Ic cut-off value: 2.60 Trans. detect. applied: No Limit depth: Peak ground acceleration: 0.19 Unit weight calculation: Based on SBT $K_{\sigma}$ applied: MSF method: Yes **SBTn Plot CRR** plot **FS Plot Cone resistance** Friction Ratio 0 0 0 2.9 2.9 0.2 0.2 0.2 3 3 0.4 0.4 0.4 3.1 3.1 0.6 0.6 0.6 3.2 3.2 0.8 0.8 0.8 3.3 3.3 1 1 1 3.4 3.4 1.2 1.2 1.2 3.5 3.5 1.4 1.4 1.4 1.6 1.6 1.6 3.6 3.6 1.8 1.8 1.8 3.7 3.7 2 2 2 3.8 3.8 2.2 2.2 2.2 3.9 3.9 (m) 3.9 4 4.1 4.1 24 2.4 2.4 4 2.6 2.6 2.6 4.1 DRILL OUT DRILL OUT DRILL OUT 2.8 2.8 2.8 4.2 4.2 3 3 3 4.3 4.3 3.2 3.2 3.2 4.4 4.4 3.4 3.4 3.4 4.5 4.5 3.6 3.6 3.6 4.6 4.6 3.8 3.8 3.8 4.7 4 4 4 4.7 4.8 4.2 4.2 4.2 4.8 4.4 4.4 4.4 4.9 4.9 4.6 4.6 4.6 5 5 4.8 4.8 4.8 5.1 5.15 5 5 5.2 5.2 5.2 5.2 5.2 0 20 40 0 2 6 8 10 2 3 0 0.2 0.4 0.6 0 0.5 4 qt (MPa) CRR & CSR Rf (%) Ic (Robertson 1990) Factor of safety $M_w = 7^{1/2}$ , sigma'=1 atm base curve Summary of liquefaction potential 0.8 1,000 Liquefaction 8 Normalized CPT penetration resistance 0.7 0.6 100 Cyclic Stress Ratio\* (CSR\*) 0.5 0.4 10 0.3 0.2 1 -0.1 Normalized friction ratio (%) 0.1

Zone A1: Cyclic liquefaction likely depending on size and duration of cyclic loading Zone A<sub>2</sub>: Cyclic liquefaction and strength loss likely depending on loading and ground geometry

Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity. brittleness/sensitivity, strain to peak undrained strength and ground geometry

120

140

No Liquefaction

180

200

160

10

Sands only

No

N/A

Method

1.5

9

2



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CLiq v.3.5.2.3 - CPT Liquefaction Assessment Software - Report created on: 31/10/2023, 3:13:14 pm Project file:



Wilton Joubert Limited 09 527 0196 196 Centreway Road, Orewa, Auckland, 0931

SITE	1 Moa Street, Ahipara
LEGAL DESCRIPTION	Proposed Subdivision of Lot 2 DP 366836
PROJECT	Proposed 1-into-2 Lot Subdivision
CLIENT	Clifford & Whetu Hau
REFERENCE NO.	130133
DOCUMENT	Civil Site Suitability Report
STATUS/REVISION NO.	B – Resource Consent
DATE OF ISSUE	25 January 2024

Attention	Email
Clifford & Whetu Hau	

Authored by	<b>G.M. Brant</b> (Be (Hons) Civil)	Civil Engineer	gustavo@wjl.co.nz	
Approved by	<b>B. Steenkamp</b> (CPEng, BEng Civil, CMEngNZ, BSc (Geology))	Civil Group Manager	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 2 DP 366836
Lot Sizes:	Proposed Lot 1 – 2,095m <sup>2</sup> Proposed Lot 2 – 6,754m <sup>2</sup>
Development Type:	Subdividing 1 Lots into 2.
Scope:	Civil Site Suitability Investigation: - Wastewater Assessment - Stormwater Assessment
Development Proposals Supplied:	Subdivision Scheme Plan, prepared by Williams and King, titled; "Proposed Subdivision of Lot 2 DP 366836" reference No. 24242, dated October 2023
Wastewater:	Recommendations for wastewater are provided in Section 5.
District Plan Zone:	Coastal Living Zone
Stormwater Management – District Plan Rules:	<b>Permitted Activity:</b> 10.7.5.1.6 STORMWATER MANAGEMENT – The maximum proportion or amount of the gross site area which may be covered by buildings and other impermeable surfaces shall be 10% or 600m <sup>2</sup> whichever is the lesser.
	<b>Restricted Discretionary Activity:</b> 10.7.5.3.8 STORMWATER MANAGEMENT – The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 15% or 1,500m <sup>2</sup> , whichever is the lesser.
	To comply with the parameters of the Permitted Activity Rule (10.7.5.1.6), Lots 1 & 2 must not exceed an impermeable area of $209.5m^2$ and $600m^2$ respectively.
Stormwater	Given the impermeable area allowances for Lots 1 & 2, we expect that the existing development within Lot 1 and future development of Lot 2 will be a Restricted Discretionary Activity. As such, we envision that a site-specific stormwater attenuation design in accordance with the FNDC Engineering Standards and recommendations herein will be required for Lots 1 & 2.
Management:	Specifically, it is recommended to attenuate the impermeable areas within Lot 1 over the Permitted Activity threshold back to pre-development flows for the 10% AEP storm event, with an allowance for climate change.
	Lot 2's impermeable areas over the Permitted Activity threshold are recommended to be managed via soakage.
	Stormwater attenuation and management recommendations are provided in Section 6.



## 2 INTRODUCTION

### 2.1 SCOPE OF WORK

Wilton Joubert Limited (WJL) were engaged by **Clifford & Whetu Hau** to undertake a civil site suitability assessment to support a 1-into-2 lot subdivision of Lot 2 DP 366836, as depicted to us on the supplied Subdivision Scheme Plan, prepared by Williams and King, titled; "*Proposed Subdivision of Lot 2 DP 366836*" reference No. 24242, dated October 2023.

At the time of report writing, no development plans have been supplied to WJL for the existing development within proposed Lot 1, nor any future development of proposed Lot 2. However, we have received written confirmation that it is proposed to construct approximately 500m<sup>2</sup> of impermeable areas within proposed Lot 2.

The scope of work included in this report is as follows:

- Wastewater Assessment (Lots 1 & 2)
- Stormwater Assessment (Lots 1 & 2)



Figure 1: Draft Subdivision Scheme Plan prepared by Tohu Consulting Ltd.

A Geotechnical Site Suitability Report has been prepared by WJL (Ref No: 130122) which should be read in conjunction with this report.

Any revision of the supplied drawings and/or development proposals with wastewater and/or stormwater implications should be referred back to us for review. This report is <u>not</u> intended to support Building Consent applications for the future proposed lots, and any revision of supplied drawings and/or development proposals including those for Building Consent, which might rely on wastewater and/or stormwater assessments herein, should be referred to us for review.



# 3 SITE DESCRIPTION

The subject site proposed for subdivision, being Lot 2 DP 366836, is located at 1A Moa Street, directly north of the intersection between Ahipara–Foreshore Road. Moa Street comes directly off Takahe Road, which is the only access point to the site from the northwestern boundary.

The 'parent Lot' is being split into 2 allotments of which, proposed Lot 1 (2,095m<sup>2</sup>) contains the existing dwelling which is situated towards the top of a localised knoll feature, on relatively level ground. Land away from the existing dwelling in all directions gently drops away to the surrounding near level terrain. Proposed Lot 2 (6,754m<sup>2</sup>) is situated on near level to gently sloping terrain of less than 3°. Besides the existing dwelling and gravel driveway, land use within the parent Lot comprises predominantly of pasture.



Figure 2: Site Photo – Overlooking the Nominated Building Platform in Lot 2. Orange Cones are Indicative of the 30m x 30m Investigated Platform.



Figure 3: Site Photo – Overlooking Drainage System Along Northern Boundary to the left.





Figure 4: Site Photo of Main Road Entrance – Facing East from the Takahe Road – Moa Street Intersection Overlooking the Shared Driveway further East.



Figure 5: Aerial Snip from FNDC Maps Showing Parent Lot's Boundaries (cyan), 1m contours (orange), Public Stormwater Infrastructure (green) and Public Wastewater Infrastructure (red).





Figure 6: Schematic Site Layout by North Arc Designs (retrieved from FNDC's Property Files)

At the time of preparing this report, we note that the Far North District Council (FNDC) GIS 3Water Services Map indicates that a stormwater channel runs through the middle of the site, north to south, and that a stormwater channel and culvert are present near the entrance to the site. We have received confirmation from the client that Lot 1's existing dwelling is connected to the wastewater line located to the west of the subject site (refer to Figure 6). A potable water connection is not available for the subject site.

# 4 PUBLISHED GEOLOGY

Local geology at the property is noted on the GNS Science New Zealand Geology Web Map, Scale 1:250,000, as; OIS5+ (Early Pleistocene – Middle Pleistocene) dune deposits (yellow shaded area). These deposits are described as; "Uncemented to moderately cemented and partly consolidated sand in coastal foredunes. Clay-rich sandy soils," refer; 'GNS Science Website'.

Approximately 260m+ to the northwest of the site, the local geology is mapped as; OIS1 (Holocene) active dune deposits of Karioitahi Group. These deposits are described as; "Loose sand in mobile dunes."

This may also allow for overlapping of older and younger material within the area however, due to the elevated nature of the landform and the existing dwelling being positioned some 11-12m above sea level, the material encountered within the investigated boreholes was indicative of Early to Mid-Pleistocene Dune Deposit materials.









Figure 7: Screenshot from New Zealand Geology Web Map hosted by GNS Science. Lot 2 DP 366836 highlighted in Blue.

In addition to the above, geotechnical testing was conducted by WJL within the subject site.

In general terms, the subsoils encountered consisted predominantly of SAND. Approximately 0mm-300mm of TOPSOIL was overlying the investigated area. Refer to the appended 'BH Logs'. Given the above, the site's soils have been classified **Category 2** in accordance with AZ/NZS 1547:2012.

# 5 <u>WASTEWATER</u>

### Lot 1

We have received confirmation from the client that Lot 1's existing residential dwelling is currently connected to the public wastewater line. As it is not proposed to redevelop Lot 1, this connection is recommended to remain.

# Lot 2

No existing wastewater management system is present within the proposed lot. As such, any future system must comply with the design details provided below. A new site-specific design in accordance with the ASNZ1547 / TP58 design manual will be required by FNDC for any future development within the proposed lots. This should be conditioned as part of the Resource Consent process.

# 5.1 DESIGN PARAMETERS

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

As no development proposals are available at this stage for the eventual residential development within Lot 2, our recommendations have been based on a moderate size dwelling containing 4 bedrooms.

# 5.1.1 Summary of Preliminary Design Parameters for a Primary Treatment System

Development Type:	Residential Dwellings
Effluent Treatment Level:	Primary ( <bod5 30="" 45="" l)<="" l,="" mg="" th="" tss=""></bod5>



Fill Encountered in Disposal Areas:	No
Water Source:	Rainwater Collection Tanks
Site Soil Category (AS/NZS 1547:2012):	Category 2 – Sandy Loams
Estimate House Occupancy:	6 Persons
Land Disposal Method:	Conventional Trenches
Loading Rate:	20mm/day
Typical Wastewater Design Flow Per Person	180l/pp/pd (Estimated – introduction of water conservation devices may enable lower design flows)
Estimated Total Daily Wastewater Production per Lot:	1,080L
Loading Method:	Dosed loading by pump or syphon
Emergency Storage Capacity:	Total holding capacity = ~4,500L Required storage time = 48 hours
Overall Bed Length Required where; L = Q / (DLR x W) L = length in m Q = design daily flow rate in L/day DLR = daily loading rate in mm/day W = width in m	L = 1080 / (20 x 0.5) = 108m
Recommended Field Setup:	6 x 18mL x 0.5mW with 1m spacings, See appended Site Plan (130133-SP)
Primary Disposal Area:	Basal = 54m² Total Covered Area = 144m² (including spacings)
Reserve Disposal Area:	Basal = 54m² (100%) Total Covered Area = 144m² (including spacings)
Buffer Zone:	Not Required
Cut-off Drain:	Not Required



### 5.2 REQUIRED SETBACK DISTANCES

The disposal and reserve areas must be situated outside the relevant exclusion areas and setbacks described within Table 9 of the PRPN: Exclusion areas and setback distances for on-site domestic wastewater systems:

Feature	Primary treated domestic type wastewater	Secondary and tertiary treated domestic type wastewater	Greywater
Exclusion areas			
Floodplain	5 percent annual exceedance probability	5 percent annual exceedance probability	5 percent annual exceedance probability
Horizontal setback distances			
Identified stormwater flow path (including a formed road with kerb and channel, and water-table drain) that is down-slope of the disposal area	5 metres	5 metres	5 metres
River, lake, stream, pond, dam or natural wetland	20 metres	15 metres	15 metres
Coastal marine area	20 metres	15 metres	15 metres
Existing water supply bore	20 metres	20 metres	20 metres
Property boundary	1.5 metres	1.5 metres	1.5 metres
Vertical setback distances			
Winter groundwater table	1.2 metres	0.6 metres	0.6 metres

Figure 8: Table 9 of the PRPN (Proposed Regional Plan for Northland).

# 5.3 NORTHLAND REGIONAL PLAN ASSESSMENT

The future wastewater disposal system should meet the compliance points below, stipulated within Section C.6.1.3 of the Proposed Regional Plan for Northland:

C.6.1.3 Other on-site treated domestic wastewater discharge-permitted activity			
The discharge of domestic type wastewater into or onto land from an on-site system and the associated discharge of odour into air from the on-site system are permitted activities, provided:			
#	Rule		
1	The on-site system is designed and constructed in accordance with the Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012), and		
2	The volume of wastewater discharged does not exceed two cubic metres per day, and		
3	The discharge is not via a spray irrigation system or deep soakage system, and		



4	The slope of the disposal area is not greater than 25 degrees, and
5	The wastewater has received secondary or tertiary treatment and is discharged via a trench or bed in soil categories 3 to 5 that is designed in accordance with Appendix L of Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012); or is via an irrigation line system that is:
	a) dose loaded, and
	b) covered by a minimum of 50 millimetres of topsoil, mulch, or bark, and
	For the discharge of wastewater onto the surface of slopes greater than 10 degrees:
	a) the wastewater, excluding greywater, has received at least secondary treatment, and
	b) the irrigation lines are firmly attached to the disposal area, and
6	c) where there is an up-slope catchment that generates stormwater runoff, a diversion system is installed and maintained to divert surface water runoff from the up-slope catchment away from the disposal area, and
	d) a minimum 10 metre buffer area down-slope of the lowest irrigation line is included as part of the disposal area, and
	e) the disposal area is located within existing established vegetation that has at least 80 percent canopy cover, or
	f) the irrigation lines are covered by a minimum of 100 millimetres of topsoil, mulch, or bark, and
7	the disposal area and reserve disposal area are situated outside the relevant exclusion areas and setbacks in Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems, and
8	for septic tank treatment systems, a filter that retains solids greater than 3.5 millimetres in size is fitted on the outlet, and
	the following reserve disposal areas are available at all times:
9	a) 100 percent of the existing effluent disposal area where the wastewater has received primary treatment or is only comprised of greywater, or
	b) 30 percent of the existing effluent disposal area where the wastewater has received secondary treatment or tertiary treatment, and
10	the on-site system is maintained so that it operates effectively at all times and maintenance is undertaken in accordance with the manufacturer's specifications, and
11	the discharge does not contaminate any groundwater water supply or surface water, and
12	there is no surface runoff or ponding of wastewater, and
13	there is no offensive or objectionable odour beyond the property boundary.

We envision that there will be no issue meeting the Permitted Activity Status requirements as outlined above.


### 6 STORMWATER MANAGEMENT

#### 6.1 ASSESSMENT CRITERIA

The site lies within the Far North District. The stormwater assessment has been completed in accordance with the recommendations and requirements contained within the Far North District Engineering Standards and the Far North District Council District Plan.

As below, the site resides in a Coastal Living Zone.



Figure 9: Snip of FNDC Maps Showing Site in Coastal Living Zone.

The following Stormwater Management Rules Apply:

**Permitted Activity:** 10.7.5.1.6 STORMWATER MANAGEMENT – The maximum proportion or amount of the gross site area which may be covered by buildings and other impermeable surfaces shall be 10% or 600m<sup>2</sup> whichever is the lesser.

**Restricted Discretionary Activity:** 10.7.5.3.8 STORMWATER MANAGEMENT – The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 15% or 1,500m<sup>2</sup>, whichever is the lesser.

To comply with the parameters of the Permitted Activity Rule (10.7.5.1.6), Lots 1 & 2 must not exceed an impermeable area of 10% or  $600m^2$ . The maximum permitted impermeable area, existing impermeable area, anticipated impermeable area and anticipated activity status for Lots 1 & 2 are as follows:

Lot	Permitted Impermeable Area (10%)	Existing Impermeable Area	Anticipated Future Impermeable Area	Anticipated Activity Status
1	209.5m²	539m²	539m²	Discretionary Activity
2	600m²	938m²	1438m²	Discretionary Activity

Note: The existing impermeable areas have been extracted from the supplied Scheme Plan prepared by Williams and King (Ref No: 24242, dated: October 2023).



Given the impermeable area allowances for Lots 1 & 2, we expect that the existing development within Lot 1 and future development of Lot 2 will be a Restricted Discretionary Activity. As such, we envision that a site-specific stormwater attenuation design in accordance with the FNDC Engineering Standards and recommendations herein will be required for Lots 1 & 2.

Specifically, it is recommended to attenuate the impermeable areas within Lot 1 over the Permitted Activity threshold back to pre-development flows for the 10% AEP storm event, with an allowance for climate change. It is proposed to manage Lot 2's stormwater discharge over the Permitted Activity threshold via soakage.

Two soakage tests were conducted at the subject site in January 2024, with the corresponding Percolation Test Graph Sheet used in calculations appended to this report. Soakage rates of 360mm/hr and 300mm/hr have been calculated using methodology from E1 Building Code. The most conservative of the two soakage rates (300mm/hr) has been used for soakage device sizing calculations.

In accordance with Section 4.3.20. of the FNDC Engineering Standards, soakage devices have been sized to manage runoff generated from a 20% AEP storm event of a 60-minute duration. Rainfall data was obtained from HIRDS, with a climate change factor of 20% added.

In addition, to appropriately mitigate stormwater runoff from future proposed impermeable areas, we recommend utilising Low Impact Design Methods as a means of stormwater management. Design guidelines should be taken from 'The Countryside Living Toolbox' design document, and where necessary, 'Technical Publication 10, Stormwater Management Devices – Design Guidelines Manual' Auckland Regional Council (2003).

## 6.2 PRIMARY STORMWATER

## 6.2.1 Lot 1

### Stormwater Runoff from Roof Area

It is our understanding that stormwater runoff from the existing dwelling's roof area is currently being directed to an above ground concrete rainwater tank for potable reuse. The upper section of the existing potable water tank is to act as a detention volume to achieve stormwater neutrality for the existing impermeable areas exceeding the Permitted Activity coverage threshold. The tank is to be fitted with a 100mmØ overflow outlet with a flow attenuation outlet as specified below.

As per the attached calculations, the design elements of the detention volume are as follows:

Existing Tank	1 x 25,000 litre Rainwater Tank
Tank dimensions	3600mm Ø (or greater) x 2600mm high (or greater)
Outlet orifice (10% AEP control)	24mm diameter orifice; located <u>&gt;1100mm below the</u> <u>Overflow Outlet</u> - 1080mm water elevation - 11.0m <sup>3</sup> Storage
Overflow Outlet	<b>100mm diameter</b> ; located at the top of the tank

It is recommended that discharge and overflow from the existing potable water tank be directed via sealed pipes to an appropriate discharge outlet in the existing channel near Lot 1's south-eastern boundary. Refer to the appended Site Plan (130133-SP), Lot 1 Tank Detail (130133-C201) and calculation set for clarification.

The existing discharge point / discharge outlet may be utilised if it is functioning and located within Lot 1's boundaries.

The above design is indicative only. Alternative designs are also acceptable. A separate detention tank may be utilised to provide the required detention volume.





### 6.2.2 Lot 2

### Stormwater Runoff from Roof Areas

Stormwater runoff from the roof of future proposed buildings must be captured by a gutter system and conveyed to potable water tanks.

One of the potable water tanks is to be fitted with a 100mmØ overflow outlet directing runoff via sealed pipes to the proposed soakpit's silt trap. The silt trap is required to be fitted with a 100mmØ outlet pipe draining to the proposed soakpit specified below.

The proposed soakpit is required to have a volume of 19.4m<sup>3</sup>, with recommended dimensions of 4.4m long x 4.4m wide x 1.0m deep. The soakpit must be lined with geotextile filter cloth and backfilled with clean 40-65mm drainage rocks to allow for a 0.38 void ratio. A minimum soil cap of 300mm is recommended, with an inspection point required to be installed. Refer to the appended Soakpit Detail (130133-C202) and calculation set for clarification.

As no development plans have been provided for the eventual development of Lot 2, the above design is based on an assumed 250m<sup>2</sup> dwelling and is indicative only. Alternative designs are also acceptable.

### Stormwater Runoff from Hardstand Areas

It is recommended to shape the existing and future proposed driveway areas to shed runoff to a soakage trench(s). The soakage trench must be lined with geotextile filter cloth and backfilled with 40-65mm drainage rocks to allow for a 0.38 void ratio. The soakage trench(s) is recommended to be 0.5m wide x 1.0m deep.

A soakage trench with the above dimensions can manage runoff resulting from 12.5m<sup>2</sup> of gravel hardstand per metre of soakage trench.

Based on the assumption that it is proposed to develop a further 500m<sup>2</sup> on Lot 2, the soakage trench servicing the proposed driveway (assumed 250m<sup>2</sup>) is required to be 20m long. To manage the remaining impermeable area over the Permitted Activity threshold (338m<sup>2</sup>), a 28m long soakage trench would need to be installed to manage runoff from the existing gravel driveway.

The soakage trench(s) must be shaped such that any overflows are directed to the existing stormwater channel running through Lot 2.

As no development plans have been provided for the eventual development of Lot 2, the above design is indicative only. Alternative designs are also acceptable.

Due to water quality concerns, runoff resulting from hardstand areas should not be allowed to drain to the potable water tanks.

### 6.3 SECONDARY STORMWATER

Where required, overland flows and similar runoff from higher ground should be intercepted by means of shallow surface drains or small bunds near structures to protect these from both saturation and erosion.



## 6.4 DISTRICT PLAN ASSESSMENT

This section has been prepared to demonstrate the likely effects of the activity on stormwater runoff and the means of mitigating runoff.

In assessing an application under this provision, the Council will exercise discretion to review the following matters below, (a) through (r). In respect of matters (a) through (r), we provide the following comments:

(a) Whether the application complies with any regional rules relating to any water or discharge permits required under the Act, and with any resource consent issued to the District Council in relation to any urban drainage area stormwater management plan or similar plan.	No discharge permits are required. No resource consent issued documents stipulating specific requirements are known for the subject site or are anticipated to exist.
(b) Whether the application complies with the provisions of the Council's "Engineering Standards and Guidelines" (2004) - Revised March 2009 (to be used in conjunction with NZS 4404:2004).	The application is deemed compliant with the provisions of the Council's "Engineering Standards and Guidelines" (2004) - Revised March 2009
(c) Whether the application complies with the Far North District Council Strategic Plan - Drainage.	The application is deemed compliant with the Far North District Council Strategic Plan - Drainage
(d) The degree to which Low Impact Design principles have been used to reduce site impermeability and to retain natural permeable areas.	Stormwater management should be provided for the subject lot by utilising Low Impact Design Methods. Guidance for design should be taken from 'The Countryside Living Toolbox' design document, and where necessary, "Technical Publication 10, Stormwater Management Devices – Design Guidelines Manual" Auckland Regional Council (2003). All roof runoff will be collected by rainwater tanks for conveyance to a safe outlet point. Low impact design principles should be used to control and mitigate the effects of increased runoff from new hardstand areas. Hardstand areas should either be managed via swales for runoff conveyance to the existing channel, or shaped to shed to soakage trenches.
(e) The adequacy of the proposed means of disposing of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces.	As above. Runoff from new roof areas will be collected, directed to rainwater tanks and discharged in a controlled manner to a discharge outlet, reducing scour and erosion. Hardstand areas should either be managed via swales for runoff conveyance to the existing channel, or shaped to shed to soakage trenches.
(f) The adequacy of any proposed means for screening out litter, the capture of chemical spillages, the containment of contamination from roads and paved areas, and of siltation.	Runoff from roof areas is free of litter, chemical spillages, or contaminants from roads. Runoff from roof areas and hardstand areas to be discharged to existing grassed channel or soakage devices.

### 13.10.4 – Stormwater Disposal



(g) The practicality of retaining open natural waterway systems for stormwater disposal in preference to piped or canal systems and adverse effects on existing waterways.	Appropriate culvert is required where Lot 2's driveway crosses the existing stormwater channel.
(h) Whether there is sufficient capacity available in the Council's outfall stormwater system to cater for increased run-off from the proposed allotments.	Lot 1's runoff from impermeable areas exceeding the Permitted Activity coverage threshold is to be attenuated back to pre- development flows for the 10% AEP storm event, with an allowance for climate change.
	exceeding the Permitted Activity coverage threshold to be managed via soakage.
(i) Where an existing outfall is not capable of accepting increased run-off, the adequacy of proposals and solutions for disposing of run-off.	Not applicable.
(j) The necessity to provide on-site retention basins to contain surface run-off where the capacity of the outfall is incapable of accepting flows, and where the outfall has limited capacity, any need to restrict the rate of discharge from the subdivision to the same rate of discharge that existed on the land before the subdivision takes place.	Not applicable.
(k) Any adverse effects of the proposed subdivision on drainage to, or from, adjoining properties and mitigation measures proposed to control any adverse effects.	Existing culverts and channels to remain.
(I) In accordance with sustainable management practices, the importance of disposing of stormwater by way of gravity pipe lines. However, where topography dictates that this is not possible, the adequacy of proposed pumping stations put forward as a satisfactory alternative.	Not applicable.
(m) The extent to which it is proposed to fill contrary to the natural fall of the country to obtain gravity outfall; the practicality of obtaining easements through adjoining owners' land to other outfall systems; and whether filling or pumping may constitute a satisfactory alternative.	Not applicable.
(n) For stormwater pipes and open waterway systems, the provision of appropriate easements in favour of either the registered user or in the case of the Council, easements in gross, to be shown on the survey plan for the subdivision, including private connections passing over other land protected by easements in favour of the user.	Not applicable.
(o) Where an easement is defined as a line, being the centre line of a pipe already laid, the effect of any alteration of its size and the need to create a new easement.	Not applicable.



(p) For any stormwater outfall pipeline through a reserve, the prior consent of the Council, and the need for an appropriate easement.	Not applicable.
(q) The need for and extent of any financial contributions to achieve the above matters.	Not applicable.
(r) The need for a local purpose reserve to be set aside and vested in the Council as a site for any public utility required to be provided.	Not applicable.

### 7 LIMITATIONS

We anticipate that this report is to be submitted to Council in support of a Resource Consent application.

This report has been commissioned solely for the benefit of our client, **Clifford & Whetu Hau**, in relation to the project as described herein, and to the limits of our engagement, with the exception that the local Territorial Authority may rely on it to the extent of its appropriateness, conditions, and limitations, when issuing the subject consent.

Any variations from the development proposals as described herein as forming the basis of our appraisal should be referred back to us for further evaluation. Copyright of Intellectual Property remains with Wilton Joubert Limited, and this report may NOT be used by any other entity, or for any other proposals, without our written consent. Therefore, no liability is accepted by this firm or any of its directors, servants, or agents, in respect of any other civil aspects of this site, nor for its use by any other person or entity, and any other person or entity who relies upon any information contained herein does so entirely at their own risk. Where other parties may wish to rely on it, whether for the same or different proposals, this permission may be extended, subject to our satisfactory review of their interpretation of the report.

This report does not cover secondary stormwater assessments or designs, including ponds.

Although this report may be submitted to a local authority in connection with an application for a consent, permission, approval, or pursuant to any other requirement of law, this disclaimer shall still apply and require all other parties to use due diligence where necessary and does not remove the necessity for the normal inspection of site conditions and the design of foundations as would be made under all normal circumstances.

Thank you for the opportunity to provide our service on this project, and if we can be of further assistance, please do not hesitate to contact us.

Yours faithfully,

## WILTON JOUBERT LIMITED

## **Enclosures:**

- Site Plan (1 sheet)
- Lot 1 Tank Detail C201 (1 sheet)
- Soakpit Detail C202 (1 sheet)
- Hand Auger Borehole Records (4 sheets)
- Calculation Set





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### NOTES:

- SITE PLAN IS ONLY INDICATIVE FOR CONCEPT DESIGN. NO MEASUREMENTS MAY BE TAKEN FROM DRAWING. ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. CONTOURS & LOCAL SERVICES ARE SHOWN INDICATIVELY ONLY. HA01 & HA02 = BOREHOLE POSITION

INDICATIVE DISTRIBUTION BOX



# 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. ALL ORIFICE OUTLETS TO BE COVERED WITH STAINLESS STEEL OR NYLON MESH.
- 7. ASSUMED USE OF 1 x 25,000 LITRE RAINWATER TANKS OR SIMILARLY APPROVED.



INLET TO GUTTER CLEARANCE & FALL TO DISCHARGE POINT







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Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points Runoff by Rational method, Rise/Fall=1.0/1.0 xTc Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Pre-DevelopmentRunoff Area=329.5 m²0.00% ImperviousRunoff Depth=24 mmTc=10.0 minC=0.44Runoff=1.65 L/s7.9 m³

Link 3L: Pre-development

Inflow=1.65 L/s 7.9 m<sup>3</sup> Primary=1.65 L/s 7.9 m<sup>3</sup>

# Summary for Subcatchment 1S: Pre-Development Impermeable Area Over Permitted Activity Threshold

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs 1A Moa Street 10-Year + CCF Duration=80 min, Inten=40.9 mm/hr

Ar	rea (m²)	C	Description		
	329.5	0.44 (	Grass, shor	t	
	329.5	,	00.00% Pe	ervious Area	a
Tc (min)	Length	Slope	Velocity	Capacity	Description
10.0	(IIIeleis)	(11/11)	(11/360)	(1175)	Direct Entry.

## Subcatchment 1S: Pre-Development Impermeable Area Over Permitted Activity Threshold



# Summary for Link 3L: Pre-development

Inflow Ar	ea =	329.5 m	1², 0.00%	Impervious,	Inflow Depth =	24 mm	for 10-Year + CCF event
Inflow	=	1.65 L/s @	0.17 hrs,	Volume=	7.9 m³		
Primary	=	1.65 L/s @	0.17 hrs,	Volume=	7.9 m³,	Atten= 0%	,Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs



# Link 3L: Pre-development



130133 - Lot 1	1A Moa Street 10-Year + CCF Duration	n=80 min, Inten=40.9 mm/hr
Prepared by Wilton Joul	bert Limited	Printed 25/01/2024
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Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points Runoff by Rational method, Rise/Fall=1.0/1.0 xTc Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 32S: Post-DevelopmentRunoff Area=294.0 m²100.00% ImperviousRunoff Depth=52 mmTc=10.0 minC=0.96Runoff=3.21 L/s15.4 m³

Subcatchment 33S: Post-DevelopmentRunoff Area=35.5 m²100.00% ImperviousRunoff Depth=52 mmTc=10.0 minC=0.96Runoff=0.39 L/s1.9 m³

Pond 15P: 1 x 25,000L Rainwater Tank Peak Elev=1.080 m Storage=11.0 m<sup>3</sup> Inflow=3.21 L/s 15.4 m<sup>3</sup> Outflow=1.24 L/s 10.2 m<sup>3</sup>

Link 16L: Post-development

Inflow=1.61 L/s 12.0 m<sup>3</sup> Primary=1.61 L/s 12.0 m<sup>3</sup>

## Summary for Subcatchment 32S: Post-Development Roof Area

Runoff	=	3.21 L/s @	0.17 hrs. Volume=	15.4 m <sup>3</sup> . Depth=	52 mm
rtanon		0.21 2.0 0			02 11111

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs 1A Moa Street 10-Year + CCF Duration=80 min, Inten=40.9 mm/hr

Ar	rea (m²)	С	Description		
	294.0	0.96	Roof		
	294.0		100.00% Im	pervious A	Area
Tc (min)	Length	Slope	Velocity	Capacity (m³/s)	Description
10.0	(1101010)		(11,000)	(, (,., (, (, (, (, (, (, (, (,.,.,,.,,	Direct Entry,

# Subcatchment 32S: Post-Development Roof Area



## Summary for Subcatchment 33S: Post-Development Concrete Hardstand Area

Runoff	_	0301/6@	0.17 brs Volume-	10 m <sup>3</sup> Denth-	52 mm
RUNOII	_	0.39 L/S @	0.17  ms,  volume-	i.e m, Depm-	5Z IIIIII

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs 1A Moa Street 10-Year + CCF Duration=80 min, Inten=40.9 mm/hr

Ar	ea (m²)	С	Description		
	35.5	0.96	Concrete		
	35.5		100.00% Im	pervious A	Area
Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					Direct Entry,

## Subcatchment 33S: Post-Development Concrete Hardstand Area



## Summary for Pond 15P: 1 x 25,000L Rainwater Tank

Inflow Area	a =	294.0 m	<sup>2</sup> ,100.00%	Impervious,	Inflow Depth =	52 mm	for	10-Year + CCF event
Inflow	=	3.21 L/s @	0.17 hrs,	Volume=	15.4 m³			
Outflow	=	1.24 L/s @	1.44 hrs,	Volume=	10.2 m³, .	Atten= 619	%, L	_ag= 75.9 min
Primary	=	1.24 L/s @	1.44 hrs,	Volume=	10.2 m³			

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs Peak Elev= 1.080 m @ 1.44 hrs Surf.Area= 10.2 m<sup>2</sup> Storage= 11.0 m<sup>3</sup>

Plug-Flow detention time= 66.6 min calculated for 10.2 m<sup>3</sup> (66% of inflow) Center-of-Mass det. time= 53.0 min ( 98.0 - 45.0 )

Volume	Invert	Avail.Storag	ge Storage Description
#1	0.000 m	26.5 n	n <sup>3</sup> 3.60 mD x 2.60 mH Vertical Cone/Cylinder
Device	Routing	Invert O	utlet Devices
#1	Primary	0.000 m <b>2</b> 4	4 mm Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.24 L/s @ 1.44 hrs HW=1.079 m (Free Discharge)

# Pond 15P: 1 x 25,000L Rainwater Tank



# Summary for Link 16L: Post-development

Inflow Are	ea =	329.5 m	<sup>12</sup> ,100.00%	Impervious,	Inflow Depth >	37 mm	for 10-Year + CCF event
Inflow	=	1.61 L/s @	1.33 hrs,	Volume=	12.0 m <sup>3</sup>		
Primary	=	1.61 L/s @	1.33 hrs,	Volume=	12.0 m³,	Atten= 0%	,Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs



# Link 16L: Post-development



Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points Runoff by Rational method, Rise/Fall=1.0/1.0 xTc Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 23S: Proposed Dwelling Runoff Area=250.0 m<sup>2</sup> 100.00% Impervious Runoff Depth=39 mm Tc=10.0 min C=0.96 Runoff=2.69 L/s 9.7 m<sup>3</sup>

Pond 24P: Proposed Soakpit for Dwelling Peak Elev=0.994 m Storage=7.3 m<sup>3</sup> Inflow=2.69 L/s 9.7 m<sup>3</sup> Outflow=0.77 L/s 6.7 m<sup>3</sup>

## Summary for Subcatchment 23S: Proposed Dwelling

Runoff	=	2.69 L/s @	0.17 hrs, Volume=	9.7 m³, Depth=	39 mm

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs 1A Moa Street 5-Year + CCF Duration=60 min, Inten=40.3 mm/hr

Ar	rea (m²)	С	Description		
	250.0	0.96	Roof		
	250.0		100.00% Im	npervious A	Area
Tc (min)	Length (meters)	Slope (m/m	Velocity (m/sec)	Capacity (m³/s)	Description
10.0	/				Direct Entry,

## Subcatchment 23S: Proposed Dwelling



# Summary for Pond 24P: Proposed Soakpit for Dwelling

Inflow Are	a =	250.	0 m²,1	00.009	6 Impervious,	Inflow D	epth =	39 mm	for 5-	Year + C	CF event
Inflow	=	2.69 L/s @	D 0.	17 hrs,	Volume=		9.7 m³				
Outflow	=	0.77 L/s @	ັ້ງ 1.	12 hrs,	Volume=		6.7 m³,	Atten= 71	%, Lao	g= 56.9 m	nin
Discarded	=	0.77 L/s @	<u>لَ</u> 1.	12 hrs,	Volume=		6.7 m³		-	-	
Routing by	Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs										
Peak Elev	= 0.994	m @ 1.12	hrs S	Surf.Ar	ea= 19.4 m²	Storage=	7.3 m³				
Plug-Flow	detentio	on time= 6	6.7 mir	n calcu	lated for 6.7 n	n³ (70% c	of inflow)				
Center-of-	Mass de	et. time= 5	7.5 mii	n ( 92.	5 - 35.0 )		,				
Volume	Inve	ert Ava	ail.Sto	rage	Storage Desc	ription					
#1	0.000	m	7.4	4 m³	4.40 mW x 4.4	40 mL x 1	1.00 mH	Prismatoi	d		
					19.4 m° Overa	ali x 38.0	1% VOIDS	i			
Device F	Routing	Ir	nvert	Outlet	Devices						
#1 [	Discarde	ed 0.00	00 m	300.0	0 mm/hr Exfilt	tration X	0.25 ove	er Wetted	area		
<b>D</b> :	$\mathbf{P}_{\mathbf{r}}$ and $\mathbf{A} = \mathbf{P}_{\mathbf{r}}$										

**Discarded OutFlow** Max=0.77 L/s @ 1.12 hrs HW=0.993 m (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.77 L/s)

# Pond 24P: Proposed Soakpit for Dwelling





Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points Runoff by Rational method, Rise/Fall=1.0/1.0 xTc Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 25S: 12.5m <sup>2</sup> Hardstand	Runoff Area=12.5 m <sup>2</sup> 0.00% Impervious Runoff Depth=30 mm
	Tc=10.0 min C=0.74 Runoff=0.10 L/s 0.4 m <sup>3</sup>
Dand 27D: Drangand Sankara Tranch	Dock Elov=0.008 m. Storogo=0.2 m <sup>3</sup> . Inflow=0.10 L/o. 0.4 m <sup>3</sup>

Pond 27P: Proposed Soakage Trench

Peak Elev=0.998 m Storage=0.2 m<sup>3</sup> Inflow=0.10 L/s 0.4 m<sup>3</sup> Outflow=0.07 L/s 0.4 m<sup>3</sup>

130133 Lot 2 Soakage	1A Moa Street 5-Year + CCF	Duration=60 min, Inten=40.3 mm/hr
Prepared by Wilton Joubert Lin	nited	Printed 25/01/2024
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## Summary for Subcatchment 25S: 12.5m<sup>2</sup> Hardstand

- <i>"</i>					~~
Runoff	=	0.10 L/s @	0.17 hrs, Volume=	0.4 m <sup>s</sup> , Depth	= 30 mm

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs 1A Moa Street 5-Year + CCF Duration=60 min, Inten=40.3 mm/hr

Ar	rea (m²)	CC	Description		
	12.5	0.74	Gravel		
	12.5	1	00.00% Pe	ervious Area	a
Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0	(	()	(,)	(,c)	Direct Entry,

## Subcatchment 25S: 12.5m<sup>2</sup> Hardstand



# Summary for Pond 27P: Proposed Soakage Trench

Inflow Are Inflow Outflow Discarded	a = = = =	12.5 m 0.10 L/s @ 0.07 L/s @ 0.07 L/s @	<sup>1²</sup> , 0.00 0.17 hrs 1.05 hrs 1.05 hrs	% Impervious, , Volume= , Volume= , Volume=	Inflow Depth = 0.4 m 0.4 m 0.4 m	30 mm 3, Atten= 30	for 5-Year + CCF event 0%, Lag= 52.8 min	
Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs Peak Elev= 0.998 m @ 1.05 hrs Surf.Area= 0.5 m² Storage= 0.2 m³								
Plug-Flow detention time= 36.6 min calculated for 0.4 m³ (100% of inflow) Center-of-Mass det. time= 36.8 min ( 71.8 - 35.0 )								
Volume	Inve	ert Avail.	Storage	Storage Desc	ription			
#1	0.000	m	0.2 m <sup>3</sup>	<b>0.50 mW x 1.</b> 000 0.5 m <sup>3</sup> Overal	00 mL x 1.00 m I x 38.0% Void	<b>H Prismato</b> i s	id	
Device F	Routing	Inve	rt Outle	t Devices				
#1 [	Discarde	n 000.0 b	m <b>300.0</b>	0 mm/hr Exfil	tration X 0.25 c	ver Wetted	area	

**Discarded OutFlow** Max=0.07 L/s @ 1.05 hrs HW=0.998 m (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.07 L/s)

# Pond 27P: Proposed Soakage Trench



Appendix D – Written Approvals



19/2/2024

Whangatauatia te maunga Karirikura te moana Whāro te Oneroa a Tōhē te takutai Tinana te waka Tumoana te tangata Wairoa te awa Te Rarawa te Iwi Mauri Ora

### Cultural Impact Assessment for: Cliff and Whetu Hau

#### 1. Introduction

This short Cultural Impact Assessment (CIA) has been prepared on behalf of Ngā Marae o Ahipara Takiwa - Roma, Wainui and Korou Kore, in response to consultation for 1A Moa Street, Ahipara subdivision. The application is for a land use consent to allow for the following activity:

2. Subdivision of 1A Moa Street, Ahipara.

#### 3. Key Aspects of the Proposal

These components form the basis of the framework (Ahipara Takiwā Management Plan, Updated in 2023) this has been used to assess the cultural impacts of the proposed land use activity. The broad concerns are impacts on the awa, takutai and moana. The cultural values identified are spirituality, kaitiakitanga and mahinga kai. Durie (1998) defines kaitiakitanga as the burden incumbent on tangata whenua to be guardians of a resource or taonga for future generations. Fulfilling kaitiaki obligations is about two things - restoring the health of a taonga and the ability of future generations to use it, and reclaiming some control over activities that affect the taonga.

The most significant taonga that may be impacted by this development access to the Wairoa Awa/River and Te tai o Whāro.

#### Wairoa Awa

The Wairoa Awa/River adjoins the subject site to the west. Te tai o Whāro is also located to the west, beside the Wairoa. Both taonga are located close to the site of development there will be additional impermeable surfaces creating which could affect the water quality of both the awa and the moana. The maintenance of high-quality aquatic habitats and the connections between water in all its forms, streams, aquifers, estuaries, and wetlands are of paramount importance. The run-off from all impermeable surfaces resulting from this will be collected in a sump.

#### Te Tai o Whāro

Whāro is the bay at the southern end of Te Oneroa ā Tōhe / Ninety Mile Beach named by Tōhē on his epic journey along the beach. The entire foreshore of Te Oneroa a Tōhē is acknowledged by tangata

whenua; as supporting significant Māori cultural practices, including the gathering of kaimoana. The controlling of discharge of pollutants from development in close proximity to the beach is a priority for tangata whenua in order to keep the resource healthy.

### 3. Policy Framework

The policy framework for considering the effects of the proposal on Ngā Marae o Ahipara and the Ahipara Takiwa comprises the following:

- Ahipara Takiwa Management Plan 2023
- ➤ Resource Management Act 1991
- ➤ Far North District Plan 2009

### 3.1 Ahipara Takiwā Management Plan 2023

3.3.3 The relevant objects and policies are as follows:

- > WP14 To oppose or mitigate any mixing of waters.
- ➤ WP6 To require the collection and storage of rainwater for all new and existing dwellings within the Takiwā
- PO15 Subdivision and other land developments ensure there is no discharge of pollutants or sewage to the beach.
- PP23 Require accidental discovery protocol to be signed between Ngā Marae o Ahipara and the developer as part of any subdivision activity requiring earthworks.
- > 3.4.2 Subdivisions and land use near coastal areas do not affect Paraweta.

### 3.2 Resource Management Act (RMA) 1991

3.2.1 The RMA provisions that are relevant to the proposal to subdivide are sections 6(e), 7(a), 8 and section 104(1)(c). These sections require that in achieving the purpose of the Act, the consent authority shall:

- recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga as a matter of national importance (section 6(e));
- ➤ have particular regard to kaitiakitanga (section 7(a));
- > take into account the principles of the Treaty of Waitangi (section 8)
- ➤ have regard to any other matter that the consent authority considers relevant and reasonably necessary to determine the application (section 104(1)(c).

### 3.3 Far North District Operative District Plan 2009

- 3.3.1 There are several provisions in the Far North District Plan that are relevant to the proposal.
  - ➤ 2.7 OBJECTIVES

2.7.3 To recognise and provide for the protection of waahi tapu and other ancestral sites and the mauri (life force) of natural and physical resources.

### ➤ 2.8 POLICIES
2.8.2 That tangata whenua be consulted over the use, development or protection of natural resources where these affect their taonga.

## 4. Conclusions and Recommendations

4.1 The proposal by the Far North District Council to carry out the development and construction of a dwelling and may not adversely affect the taonga and the cultural values identified in this report provided the following recommendations are adopted:

### **Recommandation One:**

Stormwater from the new build, driveway and concreted area not disposed into the open drain. A sump to be placed to collect water.

### **Recommendation Two:**

An advice note: Due to the changing weather patterns/global warming it is recommended that an extra tank/s on the property to capture water.

#### **Recommendation Three:**

- In addition to the standard Heritage NZ Pouhere Taonga Accidental Discovery Protocol the following *Te Runanga o Te Rarawa Protocol should be included:* That when excavation and earthworks occur Māori protocol should be and a hapū or marae observer be present at all times.
- The area was in the past a swamp and if any archaeological evidence be exposed during any future works on the subdivision, work must be stopped, and Te Runanga o Te Rarawa should be advised.
- Should any koiwi (human remains) be exposed during any future works, work must be stopped immediately, and the area secured from any further disturbance and the advice of a kaumatua (Senior Elder) nominated by Kahui Kaumatua o Te Rarawa followed in respect of further actions. Kaumatua to be given the opportunity to undertake such ceremonies and activities at the site as may be considered appropriate in accordance with Te Rarawatanga (Tikanga Māori).

nga mihi nui

Tui Qauqau Te Paa On behalf of: Roma Marae, Wainui Marae and Korou Kore Marae

Contact: 027 308 5986

**Appendix** - Ahipara Takiwā Environment Management Plan

## https://www.terarawa.iwi.nz/files/pou-environmental/ahipara-takiwa/ahipara-takiwaenvironment-management-plan-2.pdf

The 'link' has not been updated yet, but this link will take you to the updated document.



Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A – To be completed by Applicant

Applicant/s Name:	Clifford & Whetu Hau
Address of proposed activity:	1A Moa Street, Ahipara
Legal description:	Lot 2 DP 366836
Description of the proposal (including why you need resource consent):	Proposed subdivision in Coastal Living Zone creating one additional allotment. Land-use consent is also required for stormwater management.
Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval):	1.       Scheme plan         2.

### Notes to Applicant:

- 1. Written approval must be obtained from all registered owners and occupiers.
- 2. The **original copy** of this signed form and **signed plans and accompanying documents** must be supplied to the Far North District Council.
- 3. The amount and type of information provided to the party from whom you seek written approval should be sufficient to give them a full understanding of your proposal, its effects and why resource consent is needed.

#### Notes to the party giving written approval:

- 1. If the owner and the occupier of your property are different people then separate written approvals are required from each.
- 2. You should only sign in the place provided on this form and accompanying plans and documents if you fully understand the proposal and if you support or have no opposition to the proposal. Council will not accept conditional approvals. If you have conditions on your approval, these should be discussed and resolved with the applicant directly.
- 3. Please note that when you give your written approval to an application, council cannot take into consideration any actual or potential effects of the proposed activity on you unless you formally withdraw your written approval **before** a decision has been made as to whether the application is to be notified or not. After that time you can no longer withdraw your written approval.
- Please sign and date all associated plans and documentation as referenced overleaf and return with this form.
- 5. If you have any concerns about giving your written approval or need help understanding this process, please feel free to contact the duty planner on 0800 920 029 or (09) 401 5200.

Full name/s of party giving approval:				
Address of affected property including legal description				
Contact Phone Number/s and email address				
I am/we are the OWNER(S) / OCCUPIER(S) of the property	(circle which is applicable)			
Please note: in most instances the approval of <b>all</b> the legal o property will be necessary.	owners and the occupiers of the affected			
<ol> <li>I/We have been provided with the details concerning the understand the proposal and aspects of non-compliance</li> </ol>	e application submitted to Council and evith the Operative District Plan.			
<ol><li>I/We have signed each page of the plans and documents need to accompany this form).</li></ol>	tation in respect of this proposal (these			
3. I/We understand and accept that once I/we give my/our approval the Consent Authority (Council) cannot take account of any actual or potential effect of the activity and/or proposal upon me/us when considering the application and the fact that any such effect may occur shall not be relevant groupd upon the tact that any such effect the application.				
<ol> <li>I/We understand that at any time before the notification decision is made on the application, I/we may give notice in writing to Council that this approval is withdrawn.</li> </ol>				
Signature	ate 21-11-2023			
Signature Date 21-11-2023				
Signature Da	ate			
Signature	ate			

Private Bag 752, Memorial Ave, Kaikohe 0440, New Zealand, Freephone: 0800 920 029, Phone: (09) 401 5200, Fax: 401 2137, Email: ask.us@fndc.govt.nz, Website: www.fndc.govt.nz

Conclus





Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

Applicant/s Name:	Clifford & Whetu Hau
Address of proposed activity:	1A Mos Street, Ahipara
Legal description:	Lot 2 DP 366836
Description of the proposal (including why you need resource consent):	Proposed subdivision in Coastal Living Zone creating one additional allotment. Land-use consent is also required for stormwater management.
Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval):	1.       Scheme plan         2.

- The original copy of this signed form and signed plans and accompanying documents must be supplied to the Far North District Council.
- The amount and type of information provided to the party from whom you seek written approval should be sufficient to give them a full understanding of your proposal, its effects and why resource consent is needed.

PAGE 1 of 2

Notes to the party giving written approval:

1

10700

- 1. If the owner and the occupier of your property are different people then separate written approvals are required from each.
- 2. You should only sign in the place provided on this form and accompanying plans and documents if you fully understand the proposal and if you support or have no opposition to the proposal. Council will not accept conditional approvals. If you have conditions on your approval, these should be discussed and resolved with the applicant directly.
- 3. Please note that when you give your written approval to an application, council cannot take into consideration any actual or potential effects of the proposed activity on you unless you formally withdraw your written approval before a decision has been made as to whether the application is to be notified or not. After that time you can no longer withdraw your written approval.
- 4. Please sign and date all associated plans and documentation as referenced overleaf and return with this form.

	Full name/s of party giving approval:
	Address of affected property including legal description
	Contact Phone Number/s and email address
	I am/we are the OWNER(S) / OCCUPIER(S) of the property (circle which is applicable)
	Please note: in most instances the approval of all the legal owners and the occupiers of the affected property will be necessary.
-	<ol> <li>IWe have been provided with the details concerning the application submitted to Council and understand the proposal and aspects of non-compliance with the Operative District Plan.</li> </ol>
	<ol><li>trWe have signed each page of the plans and documentation in respect of this proposal (these need to accompany this form).</li></ol>
	3. If We understand and accept that once I/we give my/our approval the Consent Authority (Council) cannot take account of any actual or potential effect of the activity and/or proposal upon ma/us when considering the application and the fact that any such effect may occur shall not be relevant grounds upon which the Consent Authority may refuse to grant the application.
	<ol> <li>I/We understand that at any time before the notification decision is made on the application, I/we may give notice in writing to Council that this approval is withdrawn.</li> </ol>
	Signature Date V 04 12 23
	Signatur Data × 04/12/23
	Signature Date
	Signature Date

If you have any concerns about giving your written approval or need help understanding this 6. process, please feel free to contact the duty planner on 0800 920 029 or (09) 401 5200.

Private Bag 752, Marmorial Ava, Kalkoha 0440, New Zealand, Freephone: 0800 920 029, Phone: (09) 401 5200, Fax: 401 2137, Email: ask.us@indc.govt.nz, Weballe: www.fndc.govt.nz PAGE 2 of 2

1



EXISTING EASEMENTS IN GROSS					
PURPOSE	SHOWN	BURDENED	GRANTEE: DOCUMENT		
DRAINAGE	(A) (D)	LOT 2 HEREON	FAR NORTH DISTRICT COUNCIL		
	©	LOT 1 HEREON	EI7045183.4		
RIGHT TO CONVEY ELECTRICITY	(A) (B)	LOT 2 HEREON	TOP ENERGY LIMITED E17045183.5		
EXISTING FASEMENTS					

	PURPOSE	SHOWN	BURDENED LAND	DOCUMENT	
TI	RIGHT OF WAY RIGHT TO CONVEY ELECTRICITY AND ELECOMMUNICATIONS	(A) (B)	LOT 2 HEREON	E7045183.3	

#### MEMORANDUM OF PROPOSED EASEMENTS

PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
RIGHT OF WAY RIGHT TO CONVEY ELECTRICITY AND TELECOMMUNICATIONS RIGHT TO DRAIN SEWAGE AND RIGHT TO DRAIN WATER	(A) (B)	LOT 2 HEREON	LOT 1 HEREON

C	h	gol"=	1
 Munnard	Gilgen	Workin	

Local Authority: Far North District Council Zone: Total Area: 0.8850ha Comprised in: R1271391 Origin of Levels: Levels in terms of: Contour interval is: IMPERMEABLE AREAS LOT 1 (0.2095ha) House 294m<sup>2</sup> Concrete 245m<sup>2</sup> Tank 9m<sup>2</sup>

Total Area = 548m<sup>2</sup> (26.1%)

LOT 2 (0.6754ha) Drive 938m<sup>2</sup>

Total Area = 938m<sup>2</sup> (13.9%)

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WILLIAMS AND KING Registered Land Surveyors, Planners & Land Development Consultants Ph: (09) 407 6030 Ernai: Kerikeri@saps.co.nz PO Box 937, Keriker



Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A – To be completed by Applicant

Applicant/s Name:	Clifford & Whetu Hau
Address of proposed activity:	1A Moa Street, Ahipara
Legal description:	Lot 2 DP 366836
Description of the proposal (including why you need resource consent):	Proposed subdivision in Coastal Living Zone creating one additional allotment. Land-use consent is also required for stormwater management.
Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval):	1.       Scheme plan         2.         3.         4.         5.         6.

#### Notes to Applicant:

- 1. Written approval must be obtained from all registered owners and occupiers.
- 2. The original copy of this signed form and signed plans and accompanying documents must be supplied to the Far North District Council.
- 3. The amount and type of information provided to the party from whom you seek written approval should be sufficient to give them a full understanding of your proposal, its effects and why resource consent is needed.

PAGE 1 of 2

#### Notes to the party giving written approval:

- 1. If the owner and the occupier of your property are different people then separate written approvals are required from each.
- 2. You should only sign in the place provided on this form and accompanying plans and documents if you fully understand the proposal and if you support or have no opposition to the proposal. Council will not accept conditional approvals. If you have conditions on your approval, these should be discussed and resolved with the applicant directly.
- 3. Please note that when you give your written approval to an application, council cannot take into consideration any actual or potential effects of the proposed activity on you unless you formally withdraw your written approval **before** a decision has been made as to whether the application is to be notified or not. After that time you can no longer withdraw your written approval.
- 4. Please sign and date all associated plans and documentation as referenced overleaf and return with this form.
- 5. If you have any concerns about giving your written approval or need help understanding this process, please feel free to contact the duty planner on 0800 920 029 or (09) 401 5200.



I am/we are the OWNER(S) / OCCUPIER(S) of the property (circle which is applicable)

Please note: in most instances the approval of **all** the legal owners and the occupiers of the affected property will be necessary.

- 1. I/We have been provided with the details concerning the application submitted to Council and understand the proposal and aspects of non-compliance with the Operative District Plan.
- 2. I/We have signed each page of the plans and documentation in respect of this proposal (these need to accompany this form).
- 3. I/We understand and accept that once I/we give my/our approval the Consent Authority (Council) cannot take account of any actual or potential effect of the activity and/or proposal upon me/us when considering the application and the fact that any such effect may occur shall not be relevant grounds upon which the Consent Authority may refuse to grant the application.
- 4. I/We understand that at any time before the notification decision is made on the application, I/we may give notice in writing to Council that this approval is withdrawn.



Private Bag 752, Memorial Ave, Kaikohe 0440, New Zealand, Freephone: 0800 920 029, Phone: (09) 401 5200, Fax: 401 2137, Email: ask.us@fndc.govt.nz, Website: www.fndc.govt.nz

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Daviyi Smith.



# NOTICE OF WRITTEN APPROVAL

Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A - To be completed by Applicant Applicant/s Name: Clifford & Whetu Hau Address of proposed activity: 1A Moa Street, Ahipara Legal description: Lot 2 DP 366836 Proposed subdivision in Coastal Living Zone creating one Description of the additional allotment. Land-use consent is also required for proposal (including why stormwater management. you need resource consent): Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval): 4 5. 6.

## Notes to Applicant:

- 1. Written approval must be obtained from all registered owners and occupiers.
- 2. The original copy of this signed form and signed plans and accompanying documents must be supplied to the Far North District Council.
- 3. The amount and type of information provided to the party from whom you seek written approval should be sufficient to give them a full understanding of your proposal, its effects and why resource consent is needed.

PAGE 1 of 2

#### Notes to the party giving written approval:

- 1. If the owner and the occupier of your property are different people then separate written approvals are required from each.
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- 4. Please sign and date all associated plans and documentation as referenced overleaf and return with this form.

5.	If you have any concerns about giving your written approval or need help understanding thi	is
	process, please feel free to contact the duty planner on 0800 920 029 or (09) 401 5200.	

Ful ap	ll name/s of party giving proval:		
Ad pro des	dress of affected operty including legal scription		
Co and	ntact Phone Number/s d email address		email:
l ai	m/we are the OWNER(S) / OCCUPIER(S) of the p	roperty (circle	which is applicable)
Ple pro	ease note: in most instances the approval of <b>all</b> the operty will be necessary.	legal owners	and the occupiers of the affected
1.	I/We have been provided with the details concern understand the proposal and aspects of non-com	ing the applica pliance with th	ation submitted to Council and e Operative District Plan.
2.	I/We have signed each page of the plans and doo need to accompany this form).	cumentation in	respect of this proposal (these
3.	We understand and accept that once I/we give my/our approval the Consent Authority (Council) annot take account of any actual or potential effect of the activity and/or proposal upon me/us /hen considering the application and the fact that any such effect may occur shall not be relevant rounds upon which the Consent Authority may refuse to grant the application.		
4.	I/We understand that at any time before the notifi- may give notice in writing to Council that this app	cation decisior roval is withdra	n is made on the application, I/we awn.
Sig	gnature	Date	21/11/2023
Sig	gnature	Date	21-11-2023
Sig	Inature	Date	
Sig	Inature	Date	

Private Bag 752, Memorial Ave, Kaikohe 0440, New Zealand, Freephone: 0800 920 029, Phone: (09) 401 5200, Fax: 401 2137, Email: ask.us@fndc.govt.nz, Website: www.fndc.govt.nz

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Registered Land Surveyors, Planners & Land Development Consultants 27 Hobson Ave, PO Box 937, Kerikeri

Ph: (09) 407 6030

Email: Kerikeri@saps.co.nz

PROPOSED SUBDIVISION OF LOT 2 DP 366836

WK Oct 2023

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Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A – To be completed by Applicant

Applicant/s Name:	Clifford 8 Million			
Applicantia Name.	Clifford & Whetu Hau			
Address of proposed activity:	1A Moa Street, Ahipara			
Legal description:	Lot 2 DP 366836			
Description of the proposal (including why you need resource consent):	Proposed subdivision in Coastal Living Zone creating one additional allotment. Land-use consent is also required for stormwater management.			
Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval):	1.         Scheme plan			

#### Notes to Applicant:

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Edistinite Edistinizations					
PURPOSE	SHOWN	BURDENED LAND	GRANTEE: DOCUMENT		
DRAINAGE	(A) (D)	LOT 2 HEREON	FAR NORTH DISTRICT COUNCIL		
	©	LOT 1 HEREON	E7045183.4		
RIGHT TO CONVEY ELECTRICITY	(A) (B)	LOT 2 HEREON	TOP ENERGY LIMITED E17045183.5		

EXISTING EASEMENTS

PURPOSE	SHOWN	BURDENED LAND	DOCUMENT
RIGHT OF WAY RIGHT TO CONVEY ELECTRICITY AND TELECOMMUNICATIONS	<b>(A)</b> (B)	LOT 2 HEREON	E7045183.3

MEMORANDUM OF PROPOSED EASEMENTS

PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
RIGHT OF WAY RIGHT TO CONVEY ELECTRICITY AND FLECOMMUNICATIONS RIGHT TO DRAIN SEWAGE AND RIGHT TO DRAIN WATER	(A) (B)	LOT 2 HEREON	LOT 1 HEREON

WILLIAMS AND KING

Registered Land Surveyors, Planners & Land Development Consultants

27 Hobson Ave, PO Box 937, Kerikeri

Ph: (09) 407 6030

Email: Kerikeri@saps.co.nz



Local Authority: Far North District Council

PROPOSED SUBDIVISION OF LOT 2 DP 366836

Local Authony: Far North Zone: Total Area: 0.8850ha Comprised in: RT271391 Origin of Levels: Levels in terms of: Contour interval is:

House 294m<sup>2</sup> Concrete 245m<sup>2</sup> 9m² Tank

Total Area = 548m<sup>2</sup> (26.1%)

LOT 2 (0.6754ha) Drive 938m<sup>2</sup>

Total Area = 938m<sup>2</sup> (13.9%)

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