



## Proposed District Plan submission form

Clause 6 of Schedule 1, Resource Management Act 1991

Feel free to add more pages to your submission to provide a fuller response.

Form 5: Submission on Proposed Far North District Plan

**TO: Far North District Council** 

This is a submission on the Proposed District Plan for the Far North District.

#### 1. Submitter details:

Full Name:	Sian and Allan Shaw				
Company / Organisation Name: (if applicable)	Breakwater Trust Ltd				
Contact person (if different):	Rochelle Jacobs – Northland Planning and Development Ltd				
Full Postal Address:	PO Box 526				
	Kaitaia 0441				
Phone contact:	Mobile: 0274498813	Home:	Work:		
	0274490013		09 408 1866		
Email (please print): info@northplanner.co.nz					
Email (please print):       Info@northplanner.co.nz         2. (Please select one of the two options below)         ✓       I could not gain an advantage in trade competition through this submission         x       I could gain an advantage in trade competition through this submission         3. ✓       I am directly affected by an effect of the subject matter of the submission that:         (A) Adversely affects the environment; and       (B) Does not relate to trade competition or the effect of trade competition         I am not directly affected by an effect of the subject matter of the submission that:       (A) Adversely affects the environment; and         (B) Does not relate to trade competition or the effect of trade competition       I am not directly affected by an effect of the subject matter of the submission that:         (A) Adversely affects the environment; and       (B) Does not relate to trade competition or the effect of trade competition         Note: if you are a person who could gain advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of Part 1 of Schedule 1 of the Resource Management Act 1991         The specific provisions of the Plan that my submission relates to are:       (please provide details including the reference number of the specific provision you are submitting on)					

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	Confirm your position: Support Support In-part Oppose
	My submission is: Include details and reasons for your position)
1	Refer to the attached document.
	seek the following decision from the Council:
	(Give precise details. If seeking amendments, how would you like to see the provision amended?)
	Refer to the attached document.
-	wish to be heard in support of my submission
	I do not wish to be heard in support of my submission
	(Please tick relevant box)
	f others make a similar submission, I will consider presenting a joint case with them at a hearing
	Ves No
	Do you wish to present your submission via Microsoft Teams?
	Yes No
	Signature of submitter:
(	or person authorised to sign on behalf of submitter)
,	Date: 13/10/2022
	A signature is not required if you are making your submission by electronic means)
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Important information:

- 1. The Council must receive this submission before the closing date and time for submissions (5pm 21 October 2022)
- 2. Please note that submissions, including your name and contact details are treated as public documents and will be made available on council's website. Your submission will only be used for the purpose of the District Plan Review.
- 3. Submitters who indicate they wish to speak at the hearing will be emailed a copy of the planning officers report (please ensure you include an email address on this submission form).



Send your submission to:

Post to: Proposed District Plan Strategic Planning and Policy, Far North District Council Far North District Council, Private Bag 752 KAIKOHE 0400

Email to: pdp@fndc.govt.nz

## Or you can also deliver this submission form to any Far North District Council service centre or library, from 8am – 5pm Monday to Friday.

#### Submissions close 5pm, 21 October 2022

Please refer to pdp.fndc.govt.nz for further information and updates.

Please note that original documents will not be returned. Please retain copies for your file.

Note to person making submission

Please note that your submission (or part of your submission) may be struck out if the authority is satisfied that at least one of the following applies to the submission (or part of the submission):

- It is frivolous or vexatious
- It discloses no reasonable or relevant case
- It would be an abuse of the hearing process to allow the submission (or the part) to be taken further
- It contains offensive language
- It is supported only by material that purports to be independent expert evidence but has been prepared by a
  person who is not independent or who does not have sufficient specialised knowledge or skill to give expert
  advice on the matter.

#### SUBMISSION NUMBER

## **Breakwater Trust**

## 1. Intro

1.1. Breakwater Trust has an interest in land at 29 Koropewa Road, Waipapa. Breakwater Trust has engaged Northland Planning and Development 2020 Limited to represent them in making a submission upon this particular site.



Figure 1 - Location of 29 Koropewa Road, Waipapa

## 2. Zoning

2.1. 29 Koropewa Road, Waipapa has been rezoned to horticulture in the Proposed District Plan. It is anticipated that this is due to the Councils Land cover and Land use maps indicating that the soils are highly versatile (2s1).



Figure 2 – Landuse Capability Maps (Far North Maps)

- 2.2. A soil report has been completed at 29 Koropewa Road by AgFirst Northland Ltd. The report is attached to this submission as background information. The main points taken from this assessment are:
  - 1. The soils currently mapped as being 2s1 on the NZ Land Resource Inventory Land Use Capability database are more in line with Class 4s2 soils which are not highly versatile see extract below.

In summary, I have assessed the easier sloping land on this property as Class 4s2, Harmsworth's definition<sup>(5)</sup>, not Class 2s1. Broad drainage depressions through the property with gleyed volcanic soils, with higher clay content, more distinct iron and aluminium 'gravel' development, and pathways for storm runoff from farmland, urban development and sealed roads are assessed as Class 5w (no LUC Unit number assigned). While suited to pastoral farming, the risk of soil erosion in these floodways is too great to allow cultivation and, even grazing would need to be carefully managed in winter to avoid pugging as pugging would lead to gully erosion.

2. The site is not highly productive.

On this property, Pungaere soils are not highly versatile. They are neither highly productive nor potentially highly productive. The encroachment of housing and commercial development on the boundaries of this property prevents the potential of even very small patches of soil suited to a limited range of crops from being realised.

# 3. The site is surrounded by Residential housing development and commercial and industrial development within nearby Waipapa. Introduction of any production activity on the site would likely cause reverse sensitivity effects.

The Hall land is surrounded by housing development, with commercial and industrial development in Waipapa, immediately downhill of the property. Redevelopment for horticulture would attract opposition, particularly the use of chemicals required to enhance bud-break in kiwifruit and to control pests and diseases.

- 2.3. In addition to this soil capability assessment, a section 32 report for the Rural Environment has been prepared by 4Sight as part of this plan review process. This report provides detail on the area of land needed in order to be productive. Productive is determined as earing at least \$45,000 per year which is akin to minimum wage. The report stipulates that in order to make at least a \$45,000 return per year a site would need at least 7ha of productive land. For grape growing this would need at least 11ha of productive land. This site in itself is only 6.22ha. Of this 6.22ha, 1.4ha is covered in paving, roads and a consented boat building activity. 0.3ha is covered in buildings. 0.3ha is covered in shelterbelt vegetation, 0.7ha is on the river flat which is flood prone leaving 3.5ha of land available for limited horticultural, pastoral or forestry use. This site area is not sufficient by any means to make a profit of at least \$45,000 a year.
- 2.4. Policy HZ-P1 stipulates that Council shall Identify a horticultural zone based upon achieving matters a c. The binding word 'and' is used stipulating that all 3 must be achieved in order to classify the land as being within the Horticultural zone.

Identify a Horticulture Zone in the Kerikeri / Waipapa area using the following criteria:

a. presence of highly productive land suitable for horticultural use;

b. access to a water source, such as an irrigation scheme or dam able to support horticultural use; and

- c. infrastructure available to support horticultural use.
- 2.5. As per the assessment above and the accompanying information 29 Koropewa Road is unable to meet criteria a., such that it can be concluded that the Horticultural zone should not apply to this site.
- 2.6. As noted above, the site has recently gained resource consent (RC 2300369) to establish a boat building facility on the site, and works are currently underway to enable this activity to occur, with building consent recently being granted. This site plan, gives a better appreciation for the remaining land on site, which as shown would not be suitable for production.





2.7. As the horticultural zone is unable to be applied to this site, given it cannot meet the criteria we seek the <u>relief that the site be zoned as Rural Residential</u>. While the boat building activity S500.001 is more akin to the neighboring Light Industrial zone the surrounding environment is more residential lifestyle, such that this zoning would be more suitable to ensure that there are no adverse impacts on these neighboring sites.

2.8. The Rural Residential zone is less than 300m from the site, across the State Highway. To ensure that the site is not a zone anomaly we seek that that land between the subject site \$500.002 and the State Highway which has been zoned as horticulture as well, also be rezoned to Rural Residential. These sites range from 2000m2 through to 1.3ha. Similar to the subject site these properties are all too small to be considered highly productive land suitable for horticultural use.



While it is widely accepted that (a) is unable to be met, it should also be noted that while some sites within this area have connections to the Kerikeri Irrigation scheme, not all do as they are more residential in area. As such, some sites within this vicinity also do not conform with criteria (b). Criteria (c) is very broad, and we assume these cover connections to irrigation as per (b) above and onsite infrastructure for growing of crops. None of which are available on the sites mentioned.

#### Appendices –

- Appendix 1 Form 5
- Appendix 2 Soil Report, AgFirst
- Appendix 3 Soil Map, AgFirst
- Appendix 4 RC 2300369
- Appendix 5 Building Consent Site Plan



Date

15 August 2022

Further to our brief discussion onsite at Waipapa, please find enclosed a report explaining the land resources on your property and the suitability of your land for horticulture or arable use.

Should you or your planning consultant have any queries or any matters I have raised in the report require further explanation, please do not hesitate to contact me.

Yours sincerely

Bob Cathcart

Land and Environmental Management Consultant AgFirst Northland



Independent Agriculture & Horticulture Consultant Network

## **Property Report**

## Prepared for Allan Shaw Waipapa

Bob Cathcart 28 July 2022

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#### Disclaimer:

The content of this report is based upon current available information and is only intended for the use of the party named. All due care was exercised by AgFirst Northland Ltd in the preparation of this report. Any action in reliance on the accuracy of the information contained in this report is the sole commercial decision of the user of the information and is taken at their own risk. Accordingly, AgFirst Northland Ltd

disclaims any liability whatsoever in respect of any losses or damages arising out of the use of this information or in respect of any actions taken in reliance upon the validity of the information contained within this report.

## Land Resources Report prepared for:

## Allan Shaw 29c Koropewa Road Waipapa

## The Property

The Shaw property comprises approximately 6.2 hectares of south-facing land extending southwards from a narrow frontage on Koropewa Road to an equally narrow boundary on the banks of the Kerikeri River, immediately upstream of the Waipapa commercial and industrial area. A former orchard on the western boundary is now in large residential sections and industrial and commercial development, previously some 440 metres from the eastern boundary has spread to within only 140 metres of the boundary. Residential properties extend along the northern boundary.

Slopes on the property range from undulating to a gently rolling hillside, 4° to 7°, onto a flat area of floodplain. Drainage depressions run down both eastern and western sides of the property, that on the eastern side in a boundary drain and the western one in a swale inside of the boundary.

The property once supported an approx. 3.5ha green kiwifruit orchard, but the crop became infected with Psa, *Pseudomonas syringae pv. Actinidiae* (kiwifruit vine canker), and possibly other fungal and bacterial diseases due to wet soil conditions, and the vines had to be removed. Support frames and irrigation lines have also been removed. An approx. 1.0hectare platform has been cut across the middle of the property, levelled and topped with aggregate, and a road formed from Koropewa Road to this platform. There is a building in the northwest corner of the property.

## Soil Types

This part of Waipapa comprises a series of flat-topped ridges with entrenched valleys, the edges of a very large, dissected plateau formed approximately 3 million years ago by basalt lava flows from volcanoes in the vicinity of Okaihau. The lava flows cover sedimentary rocks of the Northland Allochthon, which would have been overlain in places by ash from local rhyolite/dacite volcanoes, including nearby Mangaparerua.

Streams have become entrenched in 30 – 60-metre-deep valleys draining the high rainfall Puketi plateau area. Basalt sediment washed off the plateau has covered most of the valley sides but, in places the underlying and less-permeable sedimentary and dacite material is close to the surface or is exposed. Being less free-draining than the basalt, the sedimentary and ash layers force groundwater to the surface, to emerge as seepages in the basalt soils around the valley sides.

The soils formed on the lava flows would have initially been clothed with higher fertility broadleaf forest, but over time, kauri assumed dominance and old, strongly leached and extremely low-fertility ironstone (laterite) soils were developed. The southern end of the

property extends onto the floodplain of the Kerikeri River, has alluvial clay soils and would have carried kahikatea-dominant bush.

The soil types on this land, as mapped by Cox, Sutherland & Taylor<sup>(1)</sup>, are Pungaere gravelly friable clay, running down onto Kamo silt loam on the floodplain of the Kerikeri River. These maps were field surveyed at a scale of 1:63,360, in places updated to 1:50,000, and published at 1:100,000. (They should not be enlarged beyond a scale of 1:50,000.) Notes appended to the published maps and unpublished reports by the same authors acknowledge that these soil maps are restricted by scale and only indicative of broader soil groups. Local experience has shown that mapping at a more detailed scale will identify a range of soil types from deeper, more free-draining phases of Pungaere soils, through shallow and bouldery soils on steeper valley sides, to mature Okaihau soils.

#### Iron and aluminium 'gravel' in Pungaere soil



A field survey of the soils on the property confirms that the sloping land is generally Pungaere gravelly friable clay, a mature and strongly leached Brown Loam, a laterite or ironstone soil formed on basalt lava flows. While there are some small patches of deeper soil with few ironstone nodules, older, more strongly leached phases of Pungaere soils, or in places even older Okaihau soils predominate. 'Gravelly' in its name is reference to nodules of iron, aluminium and manganese in the soil profile. [Now classified nationally as a 'Nodular Typic Oxidic' soil.] The iron and aluminium nodules can form a dense pan in the subsoil, particularly in hollows or around seepage areas, impeding root penetration and resulting in unstable trees. Cyclone Bola involved three days of rain before very strong winds in Northland and citrus and other orchard trees and shelterbelts were blown over.

At low pH, which this subsoil naturally is, iron, aluminium and manganese ions are 'free' in the soil, forming insoluble

compounds with other plant nutrients, like phosphorous. Not only does the 'free' iron and aluminium in this layer fix nutrients and make them unavailable to plants, the high levels of iron and aluminium are toxic to plant roots and the mycorrhiza associated with them, effectively forming a chemical 'pan' or barrier as well as, sometimes, a physical pan.

In the 8 profiles dug on the sloping land of this property during a recent survey, gravelly nodules were encountered to a greater or lesser extent from 20cm below the surface at all sites, none forming a cemented or physical barrier to root penetration to at least 30cms. Denser gravel accumulations, with an even greater concentration of clay were encountered in a profile dug in the drainage depression below the building, tending more towards Otaha gravelly clay loam or Otaha clay.

Beyond 50cm depth in each profile, there was an increasing concentration of clay, fine sediment weathered in and leached down through the soil. There are soil profiles exposed in a cutting across the middle of the section in which there are greater concentrations of gravelly nodules and even more clay beneath.

More detailed surveys<sup>(2)</sup> of extensive areas mapped as Pungaere gravelly friable clay have shown that this is a highly variable soil type, the depth of topsoil and other soil physical and chemical characteristics being very dependent on position on the landscape. Rather than a single or uniform <u>soil type</u>, it is more a family of soils, all with common parentage but each influenced by its unique environment. In some instances, Pungaere soils are associated with eroded phases of Okaihau gravelly friable clay and earlier soil surveys only recorded a 'Hill phase', a shallow soil on steeper slopes, with Okaihau soils on easier slopes.

The soil profile above the gravelly layer becomes deeper on lower and easier slopes towards the edges of the flats, showing that sediment washed off upper slopes has been deposited on lower slopes to create a deeper soil. Included in the deposited sediment is clay leached from soil on upper slopes, so, while a deeper soil, it tends to be a heavier soil and more prone to winter wetness.

Reports by NZ Soil Bureau pedologists<sup>(3)</sup> on similar sites on the nearby Kapiro Landcorp block questioned the use of these ironstone soils for horticulture, pointing out that the presence of hard nodules greatly reduced the water holding capacity of soils in summer. While this soil dryness can now be managed by irrigation from the Kerikeri Irrigation Scheme, the frequency of high intensity rainstorms and extended periods of wet weather can cause these same soils to become waterlogged for parts of the year. Because tree roots do not extend to depth in the iron and aluminium-rich subsoil, tree crops and shelterbelts can become unstable and prone to windthrow during these wet periods, and the incidence of root diseases is greatly increased. As a consequence, this soil type is not suited to deep-rooted orchard plants'

The Soil Bureau report also advised against frequent cultivation, pointing out that the thin, friable topsoil has a weak structure when dry and can be easily turned to a structureless 'dust mulch', prone to sheet and rill erosion. The report also advises avoiding exposure of plant-toxic subsoils because replanting any vegetation and/or reinstating topsoil layer is very difficult.

The flats at the southern end, comprising approximately 11% of the total area of the property, have Kamo clay loam soils, which have developed on alluvium from mainly basaltic parent material. In this case, the alluvium will be mainly clay eroded from the old ironstone soils within the catchment. Kamo clay loam is a heavy soil which shows signs of gleying below 20cm in the profile, due to a fluctuating watertable, meaning it is anaerobic for a significant part of the year. As well, this is part of the floodplain of the Kerikeri River, an area on which floodwaters pond before entering the entrenched gorge section of the river. At best, this land could be used for short-season crops (maize or sweetcorn) in summer but there would remain at risk of crops drowning in or being spoiled by ponded floodwaters.

## Land Use Capability

Unfortunately, the NZ Land Resource Inventory Land Use Capability (LUC) Database<sup>(4)</sup> contains some anomalies in respect of parts of the Far North District. Because this database covers the whole of New Zealand, is digital and easily accessible, it will most likely be used to identify highly productive land under the National Policy Statement for Highly Productive Land and is used as a planning tool by most councils in New Zealand, it is important that the data is correct. Despite requests for corrections, there has been no updating.

In this instance, old basaltic soils have been assessed as Class 2s1 on the NZLRI database, which by definition<sup>(5)</sup> are *"flat to undulating slopes on young basaltic lava flows, basaltic scoria and occasional ash below 200 m asl with fertile free draining Allophanic (brown and red loam) soils"*. This description fits the highly productive and versatile young Kiripaka, Ohaeawai, and Maunu soils on relatively recent basalt lava flows and around scoria cones near Kaikohe and around Whangarei. Harmsworth's<sup>(5)</sup> extended legend description then continues and lists much older and more limited basaltic soils, soils which do not fit the Land Use Capability Handbook<sup>(6)</sup> definition of Class 2 land – *"very good land with slight physical limitations to arable use, readily controlled by management and soil conservation*".

Class 2 land is potentially highly productive and versatile land, suitable for many cultivated crops, vineyards and berry fields, pasture, tree crops or production forestry. As previously explained, Pungaere soils are not highly productive, are not versatile, they are suited to a narrow range of orchard crops and frequent cultivation is not recommended. By the time the LUC for basalt volcanic soils reaches Class 3, this difference is recognised, and the older soils are separated from the younger ones – younger soils being Class 3s1 and the very best older soils Class 3s2. This separation of old and strongly leached from younger and more versatile soils continues into Class 4.

In my opinion, this separation of younger Red and Brown Loam soils, those on Taheke volcanics<sup>(7)</sup>, from the much older and less versatile soils on Horeke volcanic, should not have started earlier in the Classification. Only younger Maunu, Ohaeawai, Kiripaka and Papakauri soils should in class 2s1, and some of the older, generally heavier (more clay), more strongly leached and less versatile Whakapai, Waimate North and Kerikeri soils in a new Class 2s, but none of the older ironstone soils. I have defined new land use capability units in this manner in whole-farm surveys of properties with volcanic soils I have mapped to assess horticultural potential in the Waimate North, Ohaeawai and Remuera districts of the Far North.

In summary, I have assessed the easier sloping land on this property as Class 4s2, Harmsworth's definition<sup>(5)</sup>, not Class 2s1. Broad drainage depressions through the property with gleyed volcanic soils, with higher clay content, more distinct iron and aluminium 'gravel' development, and pathways for storm runoff from farmland, urban development and sealed roads are assessed as Class 5w (no LUC Unit number assigned). While suited to pastoral farming, the risk of soil erosion in these floodways is too great to allow cultivation and, even grazing would need to be carefully managed in winter to avoid pugging as pugging would lead to gully erosion.

Old basalt topsoils are very thin and have a strongly developed nutty structure that is stable when wet but easily destroyed by compaction when too wet. These older volcanic soils should be allowed to dry after rain for a few days before running heavy equipment or stock over them. Over cultivation when too dry causes the topsoil to become a fine powdery surface layer known as a 'dust mulch' that seals the surface, repelling water and increasing runoff. Because the shallow topsoils are generally free draining, they are drought prone. The iron and aluminium-rich subsoil is toxic to plant roots, causing both pasture and crop species to be shallow-rooted, exacerbating drought problems.

The alluvial Kamo soils have been assessed as Class 3w2, as shown on the NZLRI database. If this area became part of a designed ponding area to reduce flood flows in the Kerikeri River, the flats would become Class 4w1 or even 6w1, depending on the frequency depth and duration of ponding.

Current Land Uses	hectares	% of property
Excavated and constructed paved area/platform & roads	1.40	22.6
Building site, etc.	0.30	4.8
Shelterbelts	0.30	4.8
Kamo soils on river flat	0.70	11.3
Pungaere soils on slope	<u>3.50</u>	<u>56.5</u>
	6.20	100.0

That is, of the 6.2 ha of land within the property, only 4.2ha or two-thirds is available for primary production. 3.5 ha of cold, south-facing Pungaere soil is available for very limited horticultural, pastoral of production forestry use and 0.7ha of river flat is flood-prone, suited to pastoral farming and an occasional short-season maize or sweet corn crop. Even with a short season crop, there is a high risk of the crop being lost to flooding.

The approx. 1.0ha constructed pad area could be used for 'non-soil' glasshouse production, although that use could take place anywhere in the Kerikeri area, regardless of any former soil type.

## Restrictions on Land Use

Wet Soils and Flood Risk - As noted, the sloping land on the property was previously used for kiwifruit production. There is evidence of some subsurface land drainage, a series of large diameter slotted pvc pipes across the slope to intercept seepage from underlying strata. These drainage lines would need to be excavated channels, much deeper with filter 'stockings' wrapped around pipes bedded in clean gravel backfill to intercept subsurface flow and to effectively lower the watertable and, even then, there would still be 'springs' or seepages welling up between the interceptor drains. This is particularly so near the foot of the slope where the aerial imagery shows gaps within the kiwifruit orchard.

The property is also affected by runoff from properties along Koropewa Road and from the road itself. A broad grass swale would be required to carry this overland flow. It could then be captured and carried in a surface drain, excavated between the foot of the slope and the alluvial flats.

The heavy clay soils on the flats would remain wet for at least four months of the year. They need surface drains at approximately 30metre intervals with subsurface 'laser drains' (slotted pvc piping bedded in washed gravel) and mole drains. This would enable them to be grazed or to grow short season, fast maturing summer crops, provided there are no summer floods. It is understood that flood risk reduction measures being considered for Waipapa provide for flood storage on these alluvial flats to reduce pressure on the Waipapa commercial area, on the land between Waipekakoura River and Waipapa Road, and the overflow from this area northwards across Waipapa Road. This could result in floodwaters ponding on these flats for one or more days following heavy rain in the catchment.

**Reverse Sensitivity** – The subject property has residential-scale sections and development on its western and northern boundaries, industrial development within 150metres of part of its eastern boundary and the Waipapa commercial and industrial area within 450 metres of the rest of its eastern boundary. Only the narrow southern boundary on the Kerikeri Rover is well-separated from populated land. Otherwise, the property is effectively surrounded by dwellings. Even if the soils were suited to horticulture and despite an orchard having been originally established on the property, the encroachment of dwellings to within close proximity of the boundaries now makes management of a commercial orchard extremely difficult. Despite compliance with regulations and with industry good practice, the orchardist or market gardener would be subject of complaints.

Kiwifruit require a winter chill to stimulate bud-break or, in relatively frost-free areas, Hydrogen cyanamide (often referred to by the brand name Hi-Cane) is widely used in spring to promote budbreak and improve yield. While growers and their spray contractors are responsible for keeping sprays on the orchard and not allowing them to drift on to neighbouring properties, a stenching agent added to the spray can be detected often well beyond any actual spray drift. There is considerable pressure to ban the use of 'Hi-Cane'.

Other chemicals already required and likely to be required more frequently as new pests take advantage of a warmer climate, machinery working during early morning or late evening calm conditions, or, in an extreme situation, when helicopters are used to spray crops or disperse frosty air, will also attract reverse sensitivity complaints. Cold air draining down the property would carry the smell of agricultural chemicals down into the commercial and industrial centre of Waipapa.

**Potential for Horticulture** - As the sections above on soils and land use capability explain, the soil types on the property are, at best, very marginally suited to orcharding, market gardening or other forms of horticulture. They are not highly versatile soils and are capable of economically growing only a very limited range of tree, vine or crop species. The land is colder because it is south-facing and has seepage areas and overland flow paths too wet for horticulture and at risk of overland stormwater flow, causing crop damage and soil erosion.

The parcel of land has insufficient horticultural potential and has insufficient usable land to attract commercial investment in horticulture, even if the soil limitations could be mitigated.

## National Policy Statement for Highly Productive Land

Councils are under increasing pressure from Government to protect highly productive land from non-agricultural uses. The Proposed National Policy Statement for Highly Productive Land identifies land recorded as Class 1, 2 and 3 in the New Zealand Land Resource Inventory database as 'highly productive land' unless more detailed surveys have been conducted and are in use by district and regional councils.

As noted above, there are anomalies in the NZLRI Land Use Capability database in parts of the Far North District, errors which have previously been identified and the Crown Research Institute (Manaaki Whenua – Landcare Research) advised. If the District Council is to have confidence in the planning and decision-making tools it is using to implement the National Policy Statement or its own District and Regional Plan rules, these anomalies or mistakes in the original assessments need to be corrected. In particular, the assessment of very old, almost

sterile ironstone soils as Class 2, even Class 3, fails to recognise the physical and chemical limitations of these soils. They are not highly versatile soils, being suited to a very limited range of land uses and have no particular features that make them suited to any specialist crop.

Implementation of the National Policy Statement relies on the NZLRI land use capability database to identify highly productive (or potentially highly productive) soils. There is a risk in using a database prepared at a 1:50,000 scale to identify small areas. The 3<sup>rd</sup> Edition of the Land Use Capability Assessment Handbook, the 'bible' in respect of mapping and assessing land use capability in New Zealand, suggests that the smallest area of interest at a scale of 1:50,000 is 10 hectares. The NZLRI database is at best indicative when considering land for horticultural use and more detailed surveys are required to confirm the uniformity of soil type, slope and aspect within actually or potentially highly productive areas.

Mapping at a scale of 1:10,000 would provide more accurate data for planning decisions within areas identified as being generally suited to horticulture. The Hall property is a little over 6ha but contains five or more quite different land use capability units, only two of which are marginally suited to some forms of horticulture or arable use.

## Is this highly productive or potentially highly productive land?

As described above, the best of the sloping land on the Hall property, recorded as Class 2s1 on the NZLRI, has been re-assessed as Land Use Capability Class 4s2. A very detailed soil and land use capability survey, as would be undertaken in designing a drainage system and planning the layout of an orchard, would identify seepage areas, patches of even heavier soils and/or ironstone gravel, and overland flow paths, recording these areas as Classes 5w and 6w, depending on the 'age' of the soil and its physical limitations.

On this property, Pungaere soils are not highly versatile. They are neither highly productive nor potentially highly productive. The encroachment of housing and commercial development on the boundaries of this property prevents the potential of even very small patches of soil suited to a limited range of crops from being realised.

## Summary

- 1. The soils on the Hall property are wrongly assessed as Class 2s1 on the NZ Land Resource Inventory Land Use Capability database. This LUC Unit should be restricted to highly productive and highly versatile soils (Maunu, Kiripaka, Ohaeawai and some Waimate North soils) on younger basalt volcanics.
- 2. Pungaere soils on this property are highly variable, some areas are severely limited by seepages and poor natural drainage. This soil type suffers from high concentrations of iron and aluminium beyond 20cm depth in its profile, creating both a chemical and, in places, a physical barrier to plant root penetration. Pungaere gravelly clay is not recognised as a highly productive or versatile soil.
- 3. Areas of deeper Pungaere soil, patches within the former kiwifruit orchard on this property, are at best Class 4s2, a unit defined by Harmsworth in the report accompanying the NZLRI database for Northland. Some shallow soil areas within the former kiwifruit orchard, some seepage areas, drainage depressions and areas with dense gravelly subsoil over heavy clay will be Class 6.
- 4. The Hall land is surrounded by housing development, with commercial and industrial development in Waipapa, immediately downhill of the property. Redevelopment for horticulture would attract opposition, particularly the use of chemicals required to enhance bud-break in kiwifruit and to control pests and diseases.

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- 2. Hanmore, Ian. Consultancy work for Pamu.2022 Pers. Comm.
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- 4. NZLRI (New Zealand Land Resource Inventory), Landcare Research Manaaki Whenua, Lincoln, New Zealand [https://lris.scinfo.org.nz/layer/76-nzlri-land-use-capability/]
- Harmsworth, G.R. 1996. Land Use Capability classification of the Northland Region. A report to accompany the second edition (1:50,000) NZLRI worksheets. Landcare Research Science Series 9. Lincoln, Manaaki Whenua Press, 269p.
- Lynn IH, Manderson AK, Page MJ, Harmsworth GR, Eyles GO, Douglas GB, Mackay AD, Newsome PJF 2009. NZ Land Use Capability Survey Handbook – a New Zealand handbook for the classification of land 3<sup>rd</sup> Edition<sup>-</sup> Hamilton, AgResearch; Lincoln, Landcare Research; Lower Hutt, GNS Science.

7. Kermode, L.O., 1982, Whangaroa-Kaikohe, NZMS 290, Sheet P04/05, 1:100,000, New Zealand Land Inventory Rock Types, Department of Lands and Survey, Wellington

## Contact

#### Name

Bob Cathcart 027 435 2761 bob.cathcart@agfirst.co.nz

## **AgFirst Northland Ltd**

1A Douglas Street Kensington Whangarei 0112, New Zealand 09 430 2410 northland@agfirst.co.nz www.agfirst.co.nz

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## FAR NORTH DISTRICT COUNCIL

### FAR NORTH OPERATIVE DISTRICT PLAN DECISION ON RESOURCE CONSENT APPLICATION (LANDUSE)

#### **Resource Consent Number: 2300369-RMALUC**

Pursuant to section 104B of the Resource Management Act 1991 (the Act), the Far North District Council hereby grants resource consent to:

#### **Breakwater Trust**

To construct an industrial boatbuilding shed breaching scale of activity and traffic intensity in the Rural Production zone.

**Subject Site Details** 

Address:	29 Koropewa Road, Kerikeri
Legal Description:	LOT 3 DP 202022
Certificate of Title reference:	NA-129B/873

Pursuant to <u>Section 108</u> of the Act, this consent is issued subject to the following <u>conditions:</u>

**General Conditions** 

1. The activity shall be carried out in accordance with the approved site plan, elevations and floor plans prepared by Total Design, referenced Proposed New Building Breakwater Trust sheets 1-4, dated 11/02/2021, and attached to this consent with the Council's "Approved Stamp" affixed to it.

Prior to Construction

- 2. The consent holder shall, prior to the construction of the building or site development works commencing, clearly identify the extent of flooding (e.g. onsite visible markers) on the property, to ensure that the earthworks, proposed building and stormwater management and mitigation system are located outside of this area.
- 3. The consent holder shall in conjunction with obtaining building consent for the proposed building, provide for approval of Council's Resource Consent Engineer or designate a stormwater management and mitigation plan for proposed building and access. The design shall be prepared by a suitably qualified engineer. The system shall be designed such that the total stormwater discharged from the site, after development, is no greater than the predevelopment flow from the site for 10% and 1% AEP rainfall events plus allowance for climate change. (Note: consultation with council engineers prior to design commencing is recommended).

Construction

- 4. All construction works on-site are to be carried out in accordance with the noise limits recommended for residential areas in NZS6803P 1984. "Measurement and assessment of noise from construction, maintenance and demolition work"
- 5. The consent holder shall within 3 months of the issue of this consent upgrade the existing western entrance (adjacent to 33 Koropewa Rd vehicle crossing) to comply with the Council's Engineering Standard FNDC/S/2, and section 3.3.17 of the Engineering Standard and NZS4404:2004. Seal or concrete the entrance plus splays for a minimum distance of 5m from the existing seal edge. Removal of vegetation is required on bend to improve sight line distances, and improvement of grade to meet vehicle breakover requirements. This entrance shall remain single width, and is not to be used by commercial vehicles. Note: A corridor access request and traffic management plan approval will be required from Northern Transport Alliance (NTA) prior to commencing work in the legal road.
- 6. The consent holder shall prior to the occupation of proposed building or activity commencing provide to Council's Development Engineer or designate for approval a specific design prepared by a suitably qualified engineer for upgrading the existing vehicle crossing (current entrance to R.O.W on bend to 29 Koropewa Rd to a concreted double width commercial vehicle crossing (see associated Advice Notes below).
- 7. The consent holder shall prior to the occupation of proposed building or activity commencing construct the vehicle crossing as approved under condition 6 above and ensure for the duration of this consent that commercial and heavy vehicles access and egress to/from the site is from this upgraded crossing only.

Post Construction and Conduct of Activity

- 8. The consent holder shall prior to the occupation of proposed building or activity commencing and for the duration of this consent ensure that formed, surfaced, and drained access, manoeuvring, and parking for 15 vehicles, including one accessibility park, constructed in accordance with NZS4121:2001 is provided and maintained.
- 9. The consent holder shall maintain the vegetation along the western boundary to provide visual screening between the boat building activity and Lots 1 and 2 DP 380499. This vegetation shall not be removed except with written approval from Council's Delegated Officer and then only in strict compliance with any Council conditions. Note: This does not restrict vegetation clearance required to maintain sight distances at the vehicle crossing.
- 10. The exterior of the building shall be finished in a natural recessive colours and materials. This scheme shall be maintained for the lifetimes of the building and shall only be altered with written approval from Council's Delegated Officer and then only in strict compliance with any Council conditions.
- 11. The number of persons employed on site or making use of the facilities shall be restricted to 20 persons per day. (Note: this does not include occasional visitors, customers or deliveries)
- 12. The boatbuilding activity shall only be carried out within the building to reduce noise emissions from the site.

- 13. The boat building activity hours of operation shall be limited to 7.30am to 5pm weekdays.
- 14. Within 6 months of the activity commencing the consent holder will provide Council's Resource Consents Monitoring Officer with a noise management plan prepared by a suitably qualified person. The report shall verify whether noise emissions comply with the permitted standards for noise in the Rural Production zone and, if required, make recommendations to ensure ongoing compliance with the permitted standards.
- 15. In accordance with section 128 of the Resource Management Act 1991, within 12 months of the activity establishing and annually thereafter, the Far North District Council may serve notice on the consent holder of its intention to review the conditions of this consent. The review may be initiated for any of the following purposes:
  - To require the adoption of the best practicable option to remove or reduce any adverse noise effect on the environment.
  - To deal with any inadequacies or inconsistencies the Far North District Council or duly delegated Council Officer considers there to be, in the conditions of the consent, following the establishment of the activity the subject of this consent.
  - To deal with any material inaccuracies that may in future be found in the information made available with the application (notice may be served at any time for this reason).

The consent holder shall meet all reasonable costs of any such review

## **Advice Notes**

- Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority issued pursuant to that Act. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately. The New Zealand Police should also be consulted if the discovery includes koiwi (human remains). A copy of Heritage New Zealand's Archaeological Discovery Protocol (ADP) is attached for your information. This should be made available to all person(s) working on site.
- 2. Prior to conducting the upgrade of any vehicle crossing in or close to Koropewa Road reserve the consent holder shall submit a Corridor Access Request (CAR) and subsequently obtain a Work Access Permit (WAP)
- 3. Ground suitability assessment may be required at building consent stage for proposed building.
- 4. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011 Land within this lot has been identified as land that will potentially be covered by the above legislation. It will be the responsibility of the lot owner to address the regulations if proposing any further development on the site. Activities covered by the regulations include the removing or replacing of a fuel storage system; soil sampling, disturbance and/or removal; subdivision; and changing the use of the land.
- 5. The proposed activity is to comply with the permitted noise levels as set out in the District Plan. Any issue of non-compliance with the prescribed levels will necessitate

monitoring by Council, the costs of which may be required to be recovered from the applicant.

6. Activities involving discharges to air, land or water may be subject to the requirements of the Northland Regional Council Regional Plan.

#### **Reasons for the Decision**

- 1. The Council has determined (by way of an earlier report and resolution) that the adverse environmental effects associated with the proposed activity are less than minor and that there are no affected persons or affected customary rights group or customary marine title group.
- 2. District Plan Rules Affected:

Resource consent was required for a breach of rule 15.1.6a.2.1 Traffic Intensity and rule 8.6.5.1.11 Scale of Activities. An assessment of the proposal against the traffic intensity and scale of activities assessment criteria is contained in the s.95 notification report. It concluded that, subject to consent conditions, the adverse effects on the wider environment and on the owners and occupiers of adjacent properties would be less than minor.

#### Adverse effects will be minor:

It is considered the relevant and potential effects have been addressed and it has been concluded that the adverse effects will be less than minor.

#### Positive effects of the proposal:

Under s104(1)(a) the positive and potential effects of the proposal are:

a. A local business will be able to expand.

Objectives and policies of the District Plan:

The following objectives and policies of the District Plan have been considered:

#### **Relevant Rural Production Zone Objectives and Policies**

8.6.3.2 To enable the efficient use and development of the Rural Production Zone in a way that enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety.

8.6.3.3 To promote the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone.

8.6.3.6 To avoid, remedy or mitigate the actual and potential conflicts between new land use activities and existing lawfully established activities (reverse sensitivity) within the Rural Production Zone and on land use activities in neighbouring zones. 8.6.3.7 To avoid remedy or mitigate the adverse effects of incompatible use or development on natural and physical resources.

8.6.3.8 To enable the efficient establishment and operation of activities and services that have a functional need to be located in rural environments.

8.6.4.2 That standards be imposed to ensure that the offsite effects of activities in the Rural Production Zone are avoided, remedied or mitigated.

8.6.4.4 That the type, scale and intensity of development allowed shall have regard to the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone. 8.6.4.7 That although a wide range of activities that promote rural productivity are appropriate in the Rural Production Zone, an underlying goal is to avoid the actual and potential adverse effects of conflicting land use activities.

8.6.4.8 That activities whose adverse effects, including reverse sensitivity effects, cannot be avoided remedied or mitigated are given separation from other activities 8.6.4.9 That activities be discouraged from locating where they are sensitive to the effects of or may compromise the continued operation of lawfully established existing activities in the Rural Production zone and in neighbouring zones.

## **Relevant Transportation Objectives and Policies**

15.1.3.1 To minimise the adverse effects of traffic on the natural and physical environment.

15.1.3.3 To ensure that appropriate provision is made for on-site car parking for all activities, while considering safe cycling and pedestrian access and use of the site. 15.1.3.4 To ensure that appropriate and efficient provision is made for loading and access for activities.

15.1.3.5 To promote safe and efficient movement and circulation of vehicular, cycle and pedestrian traffic, including for those with disabilities.

15.1.4.1 That the traffic effects of activities be evaluated in making decisions on resource consent applications.

15.1.4.6 That the number, size, gradient and placement of vehicle access points be regulated to assist traffic safety and control, taking into consideration the requirements of both the New Zealand Transport Agency and the Far North District Council.

The objectives and policies of the Rural Production zone emphasise compatibility with productive landuses, rural amenity and wellbeing. The transportation objectives and policies emphasise ensuring road safety, reducing effects from traffic and ensuring adequate parking. The proposal has been assessed against these provisions using the relevant criteria from 11.1 Scale of Activities and 11.12 Traffic Intensity. Subject to compliance with recommended consent conditions the adverse effects of the proposed activity will be less than minor.

The proposal is not contrary to the relevant objectives and policies of the District Plan.

- 3. In accordance with an assessment under s104(1)(b) of the RMA the proposal is consistent with the relevant statutory documents.
  - a) The Northland Regional Policy Statement 2018
  - b) National Environmental Standards (NESCS)
- 4. In accordance with an assessment under s104(1)(c) of the RMA the following non statutory documents are considered appropriate
  - a) FNDC Engineering Standards and Guidelines
- 5. No other matters were considered relevant in making this decision.
- 6. Part 2 Matters

The Council has taken into account the purpose & principles outlined in sections 5, 6, 7 & 8 of the Act. It is considered that granting this resource consent application achieves the purpose of the Act.

7. In summary it is considered that the activity is consistent with the sustainable management purpose of the RMA.

Lai.)

Louise Wilson Team Leader Resource Consents

Date: 29 July 2021

#### Approval

This resource consent has been prepared by Louise Wilson, Team Leader Resource Consents and is granted under delegated authority (pursuant to section 34A of the Resource Management Act 1991) from the Far North District Council by:

WS

Independent Hearings Commissioner William (Bill) Smith

Date 29 July 2021



Approved Plan attachment above

## **Right of Objection**

If you are dissatisfied with the decision or any part of it, you have the right (pursuant to section 357A of the Act) to object to the decision. The objection must be in writing, stating reasons for the objection and must be received by Council within 15 working days of the receipt of this decision.

## Lapsing of Consent

Pursuant to section 125 of the Act, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses;

The consent is given effect to; or

An application is made to the Council to extend the period of consent, and the council decides to grant an extension after taking into account the statutory considerations, set out in section 125(1)(b) of the Act.





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P.O.Box 575

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ling Tel. (09) 407 7049 Mobile. (021) 241 9879 E-mail. brian@totaldesign.co.nz