Assessment of land owned by Vaco Investments at 47 Millbrook Road, Waipu for its potential to be subdivided under the NPS-HPL.

1 Background

Antony Arnerich of Vaco Investments Ltd has commissioned The AgriBusiness Group (TAG) to compile a report on Agricultural Productivity and Commercial Viability, including supporting evidence related to the three tests that must be met for an activity to meet the requirements for exemption from Clause 3.10 of National Policy Statement for Highly Productive Land (NPS-HPL), on land located at 47 Millbrook Road, Waipu.

Vaco Investments have lodged an application to Whangarei District Council for land use activities and associated subdivision that provides for development of approximately 6 ha (the site) of rural land, from an existing 34 ha block of land, for retail, commercial, and industrial development, inclusive of access via a proposed roundabout onto State Highway 1 and associated infrastructure. A schematic design of the proposed activity can be seen in Figure 1.

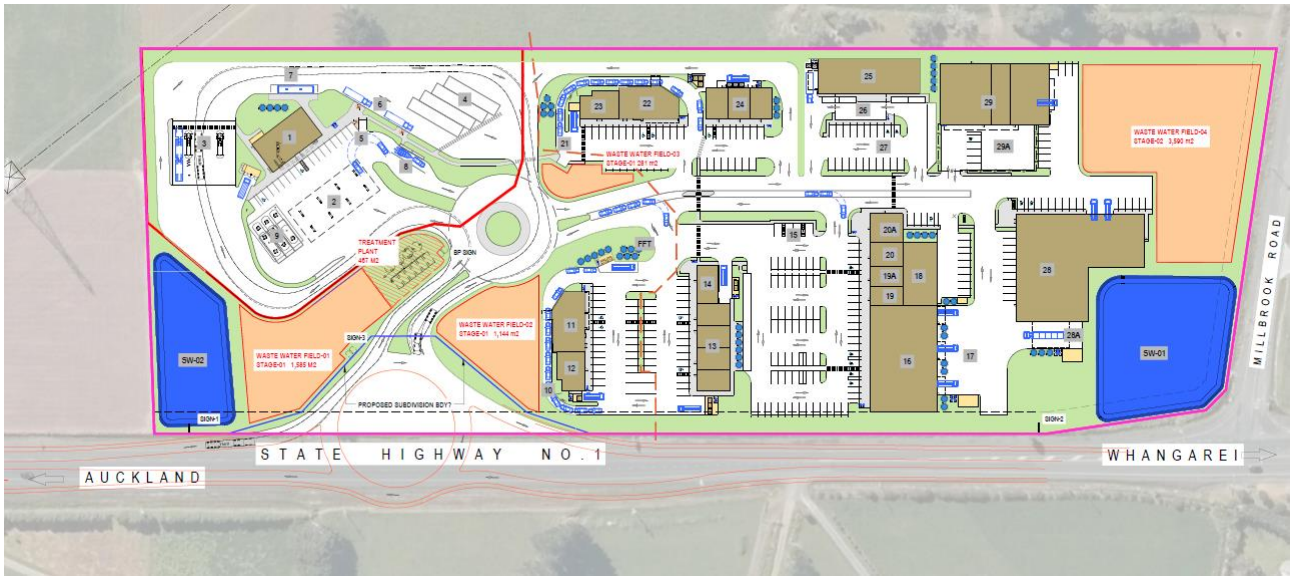

Figure 1: Schematic design of the proposed Waipu Gateway Service Centre.

The subject site is located within the Rural Production Zone and requires consent as a non-complying activity.

In the Section 42A Hearings report the author states at Paragraph 140 that:

"*Overall, the application does not provide suitable evidence to illustrate that the removal of the highly productive soils from any productive capacity as a result of the subdivision and land use activities will meet and be consistent with the NPS-HPL provisions. The fragmentation and*

resulting permanent loss of highly productive land is considered to be a more than minor adverse effect and is contrary to the NPS-HPL."

And at Paragraph 187 states:

"*The NPS-HPL has been considered in terms of both the subdivision and land use activities lodged with WDC. The NPS-HPL sets significant limitations on the use of highly productive land such that only specific exemptions under 3.10 may apply. Having considered the relevant matters in some detail, it is considered that the fragmentation of the current site as a result of the subdivision, and the resulting permanent loss of that 4ha of highly productive land due to the proposed land use activities, will have more than minor effects and is directly contrary to the NPS-HPL provisions*."

The purpose of this report is to demonstrate that the application does meet the three tests that must be met to for an activity to meet the requirements for exemption from Clause 3.10 of the NPS-HPL.

2 Description of the site

The site is on the eastern boundary of the site immediately adjacent to State Highway 1 and is adjacent to Millbrook Road on its Northern boundary.

2.1 Location and surrounding land uses.

The site's location and the surrounding land uses is shown in Figure 2**Error! Reference source not found.**, the site is outlined in Red.

Figure 2: Map of Site Showing the Neighboring Land Uses (Google Earth)

To the North of the site there is a mix of rural pastoral land uses. Across the river to the West is an extensive area of bush while to the South there is a continuation of the rural pastoral land uses. To the East there is an area of rural lifestyle land immediately adjacent to State Highway 1 and then the land uses are a combination of urban development (Waipu) and rural pastoral land uses.

2.2 Land Use Capability (LUC)

The data which is available on LUC in the New Zealand Land Resources Inventory Series (LRIS) Portal[1] is mapped at the 1:50,000 level and it is shown in **Figure 3**.

Figure 3 shows that the entire area of the site is LUC 2.

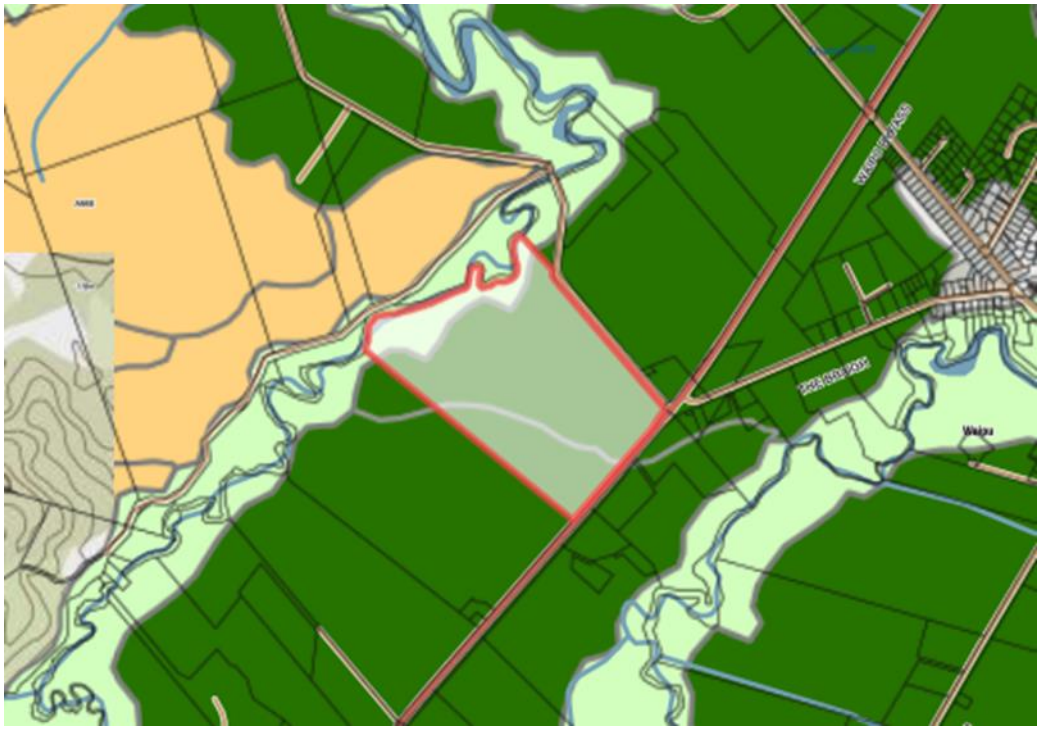

Figure 3: Land Use Capability. Dark Green is LUC 2 (NZLRI OUREnvironment)

In the NPS-HPL all land designated as LUC1,2, and 3 is automatically considered to be highly productive land (HPL).

It should be noted that the applicant only intends on changing the use of 6 ha of a total area of 27 ha of HPL land on the block of land. The remaining 19 ha will not be affected by this proposal and will be able to maintain its productive capacity.

[1] Land Use Capability » Maps » Our Environment (scinfo.org.nz)

3 Productivity

The productivity of the site is determined by a number of factors including the nature of the soils, the climate and the scale of the operation. The economic viability[2] of the site is determined by the ability of the site to return profits from the use of the site to offer the owners a sufficient return.

3.1 Soils

The soils on the site have been assessed by Ian Hanmore of Hanmore Land Management[3] and a map of his assessment of the soils on the site is shown in FX.

Figure 4: Soils on the site as identified by Ian Hanmore.

Table 1 shows the soils which have been listed as being present on the site in the Hanmore report. The table displays the area covered by these soils in ha and the percentage of the total site.

Table 1: Soils on the site by, area and proportion

Soil Type	Area (ha)	Proportion (%)
Waipu Clay	0.8	14%
Waipu peaty silt loam	3.24	55%

[2] We use the definition for viability that is used in the Cambridge dictionary which is "*the ability of a business, product, or service to compete effectively and to make a profit*".
[3] Hanmore, I. (2023): Soil and Resource Report for 47 Millbrook Road, Waipu.

Ruakaka peaty silt loam	1.03	17%
Waipu Clay and Waipu peaty silt loam.	0.84	14%
Total	**5.91**	**100%**

The Waipu clay soils, which make up 14% of the site are described as deep clay soils with a water table at 220mm with very poor to poor drainage. The Waipu peaty silt loams which constitute 55% of the area are described as peaty loams with a water table at 550mm with a relatively poor drainage. The Ruakaka peaty silt loam which constitutes 17% of the site is described as deep peaty silts with very poor drainage. The Waipu clay and peaty silt loam which makes up 14% of the site is a mix of the descriptions of the soil types which make it up.

These soil types are theoretically suitable for a limited range of arable crops, because of their very poor to poor drainage and relatively high water table, and a wide range of pastoral activities.

3.2 Land Use Constraints

There are a number of significant constraints which severely limit the range of productive land uses.

3.2.1 Scale

The scale of the site is a significant constraint because at only approximately 6 ha it lacks any of the scale which is necessary to achieve the economies of scale which are necessary to achieve commercial viability for any but the most intensive land uses.

3.2.2 Location

The site is surrounded by Millbrook Road on the Northen boundary, which services the small valley to the North of the site, State Highway to the East, the Auhora River to the West and a small grazing property on the South.

The site is virtually land locked from any access which would make it suitable for any land owner, apart from the existing land owner, to incorporate it into a larger block of land.

3.2.3 Limitations of Arable

The available arable options are limited by both the very poor to poor drainage and the relatively high water table which means that the only arable options are crops such as maize which are in the ground for the summer and are removed in the autumn.

The small scale would not allow for a crop rotation to be undertaken on the land. The block of land would have to be incorporated into a bigger growing operation in order to achieve sufficient scale to enable the landowner to both achieve a viable crop rotation and maximise productivity.

The small scale of the property makes the site not an attractive option for integration into a larger farming operation.

3.2.4 Pastoral Land Use

It would be possible for the land to be used for pastoral grazing (sheep and beef and dairy support) however there are a number of significant constraints on any intensive land use being achieved. The constraints include:

- The fact that the site has poor drainage means that in winter months the site will not be suitable for intensive grazing or stocking with heavy livestock such as cattle.
- The scale of the site being too small to offer a prospective farmer any real advantage in farming the site

It is my opinion that the site would not be an attractive option for a farmer to take it up to add to other productive land because of its location constraints, scale and poor drainage. These factors all mean that the site is not an attractive site for any large scale primary producer to wish to take it and add it to their existing operation.

It is my opinion that the highest and best land use of the site is dairy support grazing.

4 Economic Viability

It is my opinion that, because of the significant constraints to the land being used for production of primary produce, the highest and best land use would be for dairy support grazing. I have assumed that the land use is able to be managed across the whole 6 ha of the Site.

In calculating the income possible I have used The AgriBusiness Groups dairy support model which reflects the average economic performance of a dairy support operation within the Auckland / Northland Region. The metrics of that model are shown in Table 2.

The Earnings Before Interest and Tax (EBIT) that are shown in the bottom line of Table 2 shows the result of deducting the farm operating expenses from the gross revenue. The EBIT figure is the sum generated from the land which is available to pay for a return for management to the owner, which assumes that they earn the payment for labor which is in the farm operating expenses, payment of interest and taxation and still have a sum left to reward the owner for their ownership of the land.

Table 2: Key Financial Metrics of the Dairy Support Model ($/ha)

Sheep and Beef Financial	$/ha
Gross Farm Revenue	3,223
Farm Operating Expenses	1,972
Earnings Before Interest and Tax	1,251

If 6 hectares was available for production, the financial performance could be as shown in Table 3.

Table 3: Financial Performance of the site ($)

Sheep and Beef Whole Site Financial Performance	$
Gross Farm Revenue	19,338
Farm Operating Expenses	11,832
Earnings Before Interest and Tax	7,506

While determining the exact amount necessary for generating sufficient income beyond Earnings Before Interest and Tax is subjective, an estimate can be obtained by incorporating a management return of 1.5% of Gross Revenue and interest payments on 50% of the property's capital value at

7%. This calculation yields a total required amount to generate sufficient income as being $10,235 while the property can only provide $7,506. It's important to note that, under the given assumptions, there would be no tax obligation, as the net taxation position of the site would result in a slight taxation loss.

It is my opinion that the pastoral land use that could potentially establish on the 6ha site is unable to provide sufficient income to provide for interest, taxation and a return for management as a stand-alone unit therefore it cannot be considered to be commercially viable.

Therefore, I conclude that the site is unable to be considered as commercially viable both now and in 30 years' time.

In coming to this conclusion, I have considered that the permanent or long-term constraints on economic viability cannot be addressed through any reasonably practicable options that would retain the productive capacity of the highly productive land, by evaluating options such as:

(a) The alternate forms of land-based primary production are severely constrained by the scale, location and the poor drainage constraints which are on the Site.

(b) The economic viability test has been carried out by using the most advanced land-management strategy that is available on the Site.

(c) Alternative production strategies have been rejected because of the severe constraints on the site to adopting them.

(d) Water efficiency or storage methods are not appropriate to this site.

(e) Reallocation or transfer of water and nutrient allocations is not a viable factor on this Site.

(f) Boundary adjustments, including amalgamations, are not possible because the Site is already tightly constrained within a densely subdivided area.

(g) the size of the site precludes the block being leased to another larger farming operation.

5 Consideration of the NPS-HPL

We were asked to comment on relevant matters in the NPS-HPL given the productivity and viability findings in this report.

Clause 3.10 in the NPS-HPL Exemption for highly productive land subject to permanent or long-term constraints states that:

(1) Territorial authorities may only allow highly productive land to be subdivided, used, or developed for activities not otherwise enabled under clauses 3.7, 3.8, or 3.9 if satisfied that:

  (a) there are permanent or long-term constraints on the land that mean the use of the highly productive land for land-based primary production is not able to be economically viable for at least 30 years; and

  (b) the subdivision, use, or development:

    (i) avoids any significant loss (either individually or cumulatively) of productive capacity of highly productive land in the district; and

    (ii) avoids the fragmentation of large and geographically cohesive areas of highly productive land; and

(iii) avoids if possible, or otherwise mitigates, any potential reverse sensitivity effects on surrounding land-based primary production from the subdivision, use, or development; and

(c) the environmental, social, cultural and economic benefits of the subdivision, use, or development outweigh the long-term environmental, social, cultural and economic costs associated with the loss of highly productive land for land-based primary production, taking into account both tangible and intangible values.

(2) In order to satisfy a territorial authority as required by subclause (1)(a), an applicant must demonstrate that the permanent or long-term constraints on economic viability cannot be addressed through any reasonably practicable options that would retain the productive capacity of the highly productive land, by evaluating options such as (without limitation):

(a) alternate forms of land-based primary production:

(b) improved land-management strategies:

(c) alternative production strategies:

(d) water efficiency or storage methods:

(e) reallocation or transfer of water and nutrient allocations:

(f) boundary adjustments (including amalgamations):

(g) lease arrangements.

In providing this report I have taken account of the "National Policy Statement for Highly Productive Land Guide to Implementation" dated March 2023. I have adopted the three tests which the proposal must meet to determine whether the site has permanent or long-term constraints for which exemptions apply and I have analysed each of the tests set out in Section 3.10 of the NPS.

The first test determines that there are permanent or long-term constraints on the land that mean the use of the highly productive land for land-based primary production is not able to be economically viable for at least 30 years. I have evaluated the two steps. The first step is that there is a permanent or long-term constraint on the land that will be present for at least 30 years. Having listed and analysed those factors I have then assessed the second step which is that the constraint means that land-based primary production cannot be economically viable for at least 30 years.

The second test is to assess whether the granting of this consent would compromise the ability of other HPL land in the district to be used for land based primary production.

The third test is whether the benefits of the proposed development outweigh the costs of the loss of highly productive land taking into account both tangible and intangible values.

In relation to 1 (a), it is my opinion that the use of HPL for primary production on the Site is not able to be economically viable for at least 30 years and that in coming to that conclusion I have evaluated all of the reasonably practical options.

In reaching this conclusion, we have considered the following practical options:

- The model used to assess the commercial viability of the block has used the highest and best land use option considering the constraints on the land.
- The model used reflects the average performance of the representative model.

In relation to 1 (b) (i), I am of the opinion that the subdivision of 6 ha of HPL will not result in any significant loss of the productive capacity of land in the district and is not significant in the Northland region which contains 127,885 ha of HPL land[4].

In relation to 1(b) (ii), I am of the opinion that the proposal avoids fragmenting large and geographically cohesive areas of HPL. The scale of the area to be subdivided, comprising 6 hectares, is not significant in the context of the surrounding HPL land and will not contribute significantly to additional fragmentation.

In relation to 1(b) (iii), I am of the opinion that the proposal mitigates potential reverse sensitivity effects on surrounding land-based primary production. This is because the nature of the proposal will not generate any reverse sensitivity effects because it is not primary production.

In relation to 1(c) our assessment of the costs and benefits of the proposal are shown in Table 4.

The range of both tangible and non tangible costs and benefits that have been used in this assessment have been taken from the Cost Benefit Analysis[5] carried out on the NPS-HPL. They are as displayed in Table 4.

I am of the opinion that I have the expertise to carry out a qualitative assessment of the benefits of the proposed development as well as the costs of the loss of HPL land. In doing so I have drawn on my professional experience, that of my colleagues who are environmental consultants and of the developer.

Table 4: Costs and Benefits Proposal

Category	Costs of loss of HPL	Benefits of the development
Environmental		
Carbon sequestration		Positive benefit but of an insignificant scale.
Support Habitat	Loss but of an insignificant scale.	
Water filtration		Positive benefit but of an insignificant scale.
Flood mitigation		Positive benefit but of an insignificant scale.
Nutrient		Positive benefit but of an insignificant scale.
Climate regulation		Positive benefit but of an insignificant scale.
Air and water quality	Loss but of an insignificant scale.	

[4] AgFirst (2017): Analysis of drivers and barriers to land use change. A report prepared for MPI.
[5] Market Economics (2020): National Policy Statement – Highly Productive Land. Cost-Benefit Analysis

Biodiversity conservation	Loss but of an insignificant scale.	
Social/ Cultural		
Sense of belonging and place		Positive benefit but of an insignificant scale.
Social fabric		Positive benefit but of an insignificant scale.
Food security	Loss but of an insignificant scale.	
Spiritual value	Loss but of an insignificant scale.	
Economic		
Income		Considerably higher benefit.
Employment		Enhanced
Flow on impacts to a wider community		Enhanced

The net environmental impacts are favourable due to preventing two adverse effects resulting from land-based primary production: nutrient loss and emissions of greenhouse gases. These will both be reduced by the removal of livestock and fertiliser use on the property. This will however be a small-scale effect due to the scale of the property.

Social impacts will see positive impacts from an improvement in both a sense of place and social fabric while it is likely that the food security and spirit value will be negative impacts on the loss of HPL. However because of the scale of the area lost this will be an insignificant loss. The subdivision of the site will contribute to increased activity on the site and additional local expenditure will contribute to increased vibrancy in the community surrounding the site.

The economic impact is positive because the site's highest and best use for primary production is not commercially viable. Effectively transitioning to another commercially viable land use will bring positive economic benefits.

This leads to the conclusion that the proposed development would result in economic, social and environmental benefits that outweigh the costs associated with the loss of HPL.

6 Conclusion

I conclude that the proposed subdivision of the site to enable the development of the 6 hectares meets all of the limbs in the clause 3.10 Exemption tests and therefore Whangarei District Council should be satisfied that this HPL can be subdivided, used, or developed for activities not otherwise enabled under clauses 3.7, 3.8 or 3.9.