

Our Reference: 191149

26th November 2020

Sara Clarke Manager, COVID-19 Fast-track Consenting Ministry for the Environment

Electronically delivered to fasttrackconsenting@mfe.govt.nz

Dear Sara,

RESPONSE TO FURTHER INFORMATION REQUEST FOR KAPUNI GREEN HYDROGEN PROJECT

In response to your further information request (the request) received via email on 16 November 2020, I can confirm the following information below which corresponds with the numbering used in your letter.

1.

- a. The site address as detailed in the application includes 414 Kokiri Road, Kapuni, which is shown on the Taranaki Regional Council property information system as Lot 1 DP 9598. Lot 1 DP 9598 is not included in the list of legal descriptions in the application form, nor is it identified on the consultation map in the graphic supplement. Please confirm whether the project will include any activities on 414 Kokiri Road, Kapuni (Lot 1 DP 9598).
 - 414 Kokiri Road/Lot 1 and 2 DP 9598 forms part of the Parininihi Ki Waitotara Incorporated (PKW) Farm. It is proposed to run the underground power cable through Lot 1 DP 9598 and, if Option 1 is preferred, then also through Lot 2 DP 9598. However, it is not anticipated that resource consent will be required for the power cable. This matter is discussed further in the response to question 2a.
- b. It is noted that unlike Sections 66 and 68, Section 67 Block III Waimate SD does not appear to have a leasehold title. Please confirm that this is the case and if so provide details of approval/s being sought from the landowner, including outcomes (where applicable) and timeframes.
 - Section 67 Block III Waimate SD does not have a leasehold title. However, this does not change the legal agreement sort (i.e. easement) which is outlined in Part II of the application. The easement being sought is with The Proprietors of Parininihi Ki Waitotara Block (PKW Inc) in the capacity of landowner and PKW Farms LP in the capacity of leasehold owner and farming operator.
- c. The application does not contain sufficient details of the proposed activities to enable an assessment to be undertaken under the Act. Please provide the following:
 - A locality plan clearly identifying all the landholdings subject to the application. The only plan provided is a consultation plan identifying the proposed wind turbine site.
 - Site plans (concept is acceptable at this stage) of each site where physical works/development is proposed clearly showing the proposed location of key components involved in the project, e.g. access points, proposed buildings and structures, load-out facilities, other physical works.

• Specifications/parameters of buildings and structures proposed for each site, including bulk and location, setback from boundaries, etc. It is acknowledged that some of these details may be subject to final confirmation but maximum parameters should be provided where possible.

A locality plan is attached as **Appendix A** and a site layout plan for the PKW farm and for the Ballance Kapuni Plant showing the key components of the project is attached as **Appendix B**. An plan showing the turbine dimensions is attached as **Appendix C**.

d. The application details that "excess power" is expected to be fed into the grid. Please provide further details (if possible) on the proportion/quantities of electricity that is anticipated to be utilised for urea production vs fuel cells/transport vs exporting to the network.

The first 4.3 MW of electricity generated by the turbines will be used to power the Ballance site. The next tranche of electricity generation above 4.3 MW will nominally be used to produce green hydrogen. The hydrogen electrolysers have a maximum consumption of approximately 7.5 MW of electricity. If enough electricity is generated to supply the Ballance site plus the maximum hydrogen electrolyser demand, a total of 11.9 MW, excess generation will be exported to the grid.

In addition, if the grid demand is high, the generated electricity may be exported to the grid in preference to hydrogen production from time to time.

The graph below shows the estimated generation and percentage of time each service will be supplied from the wind farm.



For the 4 x 6MW turbine case, the Annual Energy Production generated from the wind turbines is forecast to be 102GWhr with power consumption split between:

- 28.6% will be supplied to Ballance
- 38.7% for hydrogen production; and
- 32.7% exported to the Grid.

Hydrogen production is planned to transition from 100% urea to approximately 90% transport market over a 10 year period as the fuel cell electric vehicles market increases.

e. Please confirm that consent may be required under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011. If so, it is recommended to include this aspect within the project's scope to be considered for referral.

It is unlikely that consent will be required under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES). The PKW Farm does not contain any known HAIL site. The Ballance Kapuni Plant is considered a HAIL site however it is anticipated that volumes of soil disturbance required will be within the permitted thresholds of the NES. However, at this stage the applicant can't rule out entirely the need for a consent under the NES so would like to include this aspect in the application for referral on a precautionary basis. If consent is required it would be for soil disturbance activities which would likely be dealt with as a discretionary activity and managed via a contaminated soils management plan.

2.

a. The application states that "underground power lines will be installed from the circuit breaker position to the Powerco lines on Palmer Road or to the Ballance Kapuni Plant north of the PKW farm". Please advise whether there are any resource consent requirements related to either option (or identify the relevant permitted activity rule/s if not), and identify any additional land parcels (and owners) that may be affected if the transmission infrastructure will pass through private property.

The underground power cables and any associated buildings or structures including incidental equipment will be assessed as a network utility under the Proposed South Taranaki District Plan which are permitted activities in all zones provided they comply with performance standards in section 14.2 of the Plan. The power cable and associated buildings or structures including incidental equipment will comply with the performance standards and therefore will be assessed as a permitted activity.

The applicant is exploring two options for the power cable route. The two options have different CAPEX and OPEX considerations with the final decision to be based on the commercial agreement with the respective lines and power companies.

Option 1 will see the cable run from the turbines eastwards across the PKW Farm and then cross Kokiri Road before running through Lots 1 and 2 DP 9598 and connecting into the 33KV Powerco network lines running along the west side of Palmer Road. This option forms part of the (final draft) easement agreement with PKW. A Deed of Easement with STDC for running the power cable across Kokiri Road will also be required. Hiringa have had initial discussions with STDC to understand the form of agreement required and have another meeting arranged to discuss the details within the next week. Hiringa have agreed a technical solution with Powerco to allow connection to their lines.

Option 2 provides a new direct 33kV line to the Ballance Kapuni Plant. This option requires an easement with a single landowner (Luscombe/Hendham Farm Company) and would pass through Ngatimanuhiakai 21A and 21B1 Blocks, Part Section 44 Block XV Kaupokonui SD and Lot 2 DP 499347. Hiringa has an established relationship with the landowner and is finalising an easement option for the power cables. A Deed of Easement with STDC for running the power cable across Kokiri Road and Skeet Road would also be required. Option 2 forms part of the discussions with STDC.

The application details that a water permit is required, however the rules identified from the Regional Freshwater Plan for Taranaki (Rules 54 and 64 relating to culverts) appear to relate to land-use consent requirements (Section 13 of the RMA), rather than a water permit requirement (Section 14 of the RMA). Please clarify.

The additional water use for the project can be accommodated within the consent limits of an existing water permit held by Ballance. A minor variation to the purpose of the existing water permit is being sought by Ballance so that water can be used in the electrolysis process. This variation is being sought separately and will not form part of the consent application for the Green Hydrogen Project.

Land use consent for culverts on the PKW Farm related to the upgrade of the farm access tracks may be sought (TBC) as alluded to in the application. This will be confirmed during detailed design.

- c. Please advise whether there are still any operative provisions of the South Taranaki District Plan 2004 under which consent is required (as it is noted that the online version of the Proposed South Taranaki District Plan (Appeals Version – February 2017) lists several live appeals, including Rule 13.1.4 as detailed in the application).
 - The appeals relating to Rule 13.1.4 have both been settled by consent order. The online version of the Proposed South Taranaki District Plan (Appeals Version February 2017) is yet to be updated. There are no operative provisions of the South Taranaki District Plan 2004 relevant to the application.
- d. Please advise whether the classification of the proposal as a "large-scale renewable electricity generation activity", and therefore the applicability of Section 13 Energy Rules, has been confirmed/agreed with the South Taranaki Regional Council. It is noted that the definition includes that the activity is "for the purpose of exporting electricity directly into the distribution network or National Grid". This is to clarify/confirm the applicable rules under which consent is required.
 - The applicant had discussions with STDC in 2019 which confirmed the wind turbine component of the project as a large-scale renewable electricity generation activity. The applicant has also taken legal advice which supports this opinion given that one of the purposes of the energy generation is to export electricity to the grid. In any case, if the wind turbines were not considered to meet the definition of large-scale electricity generation, they would default to a discretionary activity under Rule 3.1.4 (m) retaining the same discretionary activity status.
- e. Further to the above, it is noted that the introduction to Section 13 Energy Rules details that "the rules contained in this section take precedence over any other zone rules that may apply to energy activities in the District Plan, unless specifically stated to the contrary". If Section 13 Energy Rules is applicable, please clarify whether the Rural Zone, Parking and Transportation, and District Wide rules are applicable (as detailed in the application).
 - The Energy Rules are applicable for the wind turbine component of the project and therefore we acknowledge the suggestion made that the Energy Rules should take precedence over the rural zone rules. This would result in consent no longer being required under Rule 3.1.4. However, we do not consider the electrolysis and refuelling infrastructure at the Ballance Kapuni Plant would be considered as Energy Activities and therefore Rule 8.1.4 would continue to apply. Additionally, and being a matter that was not captured in the application, the refuelling infrastructure will not meet the minimum setback distance for buildings from Palmer Road under Performance Standard 8.2.2 (3) and therefore consent will be required under Rule 8.1.4 (b) as a discretionary activity. We also note that the introduction to the Energy Rules states that 'District wide rules including Section 11 Noise, Section 12 Hazardous Substances, Section 15 Heritage Protection, Section 17 Natural Environment, and Section 19 Signs will still apply'. The applicant therefore considers that all of the district wide rules in the Proposed Plan apply to Energy Activities and therefore consent is still required under Rule 10.1.4 and Rule 18.1.3.
- 3. Please provide details of any confirmed agreements (including in principle) with the landowners and lease holders to undertake the project. The application notes that

easements are proposed, however further certainty is required to provide assurance of the projects ability to proceed in a timely manner.

An agreement is required with PKW to provide an easement to allow installation and operational access for the wind turbines and underground cables. Hiringa have been working with PKW on this project for 18 months with a Lidar wind monitoring device installed on farm since July 2019.



agreements for the power cable routes has been provided in response 2a.

4. Please clarify the projected job numbers as they vary in different parts of the application, e.g., references to 100 jobs vs 200 jobs. In addition, it would be useful if you can provide job numbers that the project will create in FTE's per defined time period, e.g., X new FTE's over X months/years design and construction period, X new FTE's during operation, etc. Please also identify (where relevant) between direct and indirect new jobs created.

To clarify the projected jobs, to date around 100 people have been directly involved in the project (in some capacity). By project completion approximately 240 people will be involved in the project equating to an average of 40 FTE's over the next 18 months or ~ 129,000 hours of labour for the project. The chart below shows the forecast work force in FTE's for each month until project completion. This chart includes direct jobs where employees and contractors will be paid directly from the project. We have not attempted to quantify the indirect staff.



5. The application refers to decisions still needing to be made on investment and project funding. Please confirm high-level details/options to provide assurance of project funding to demonstrate that the project will be able to deliver on the employment and investment certainty objectives of the Act.

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It is noted that the application does not specifically provide recognition/comment/ assessment on the potential susceptibility of the site/s and project to hazards associated with future volcanic eruptions. Please note that this would be a relevant matter requiring

The applicant acknowledges this point, is aware of the matters to be covered in an assessment of environmental effects under Schedule 6 Part 1 Section 11 of the Fast Track Consenting Act and will ensure this matter is addressed if the application for referral is successful.

We trust that the above provides the necessary information for MfE to continue with their evaluation of the application. We would appreciate the opportunity to discuss the above information with you.

consideration should the project be referred to an expert consenting panel.

Yours sincerely,

6.

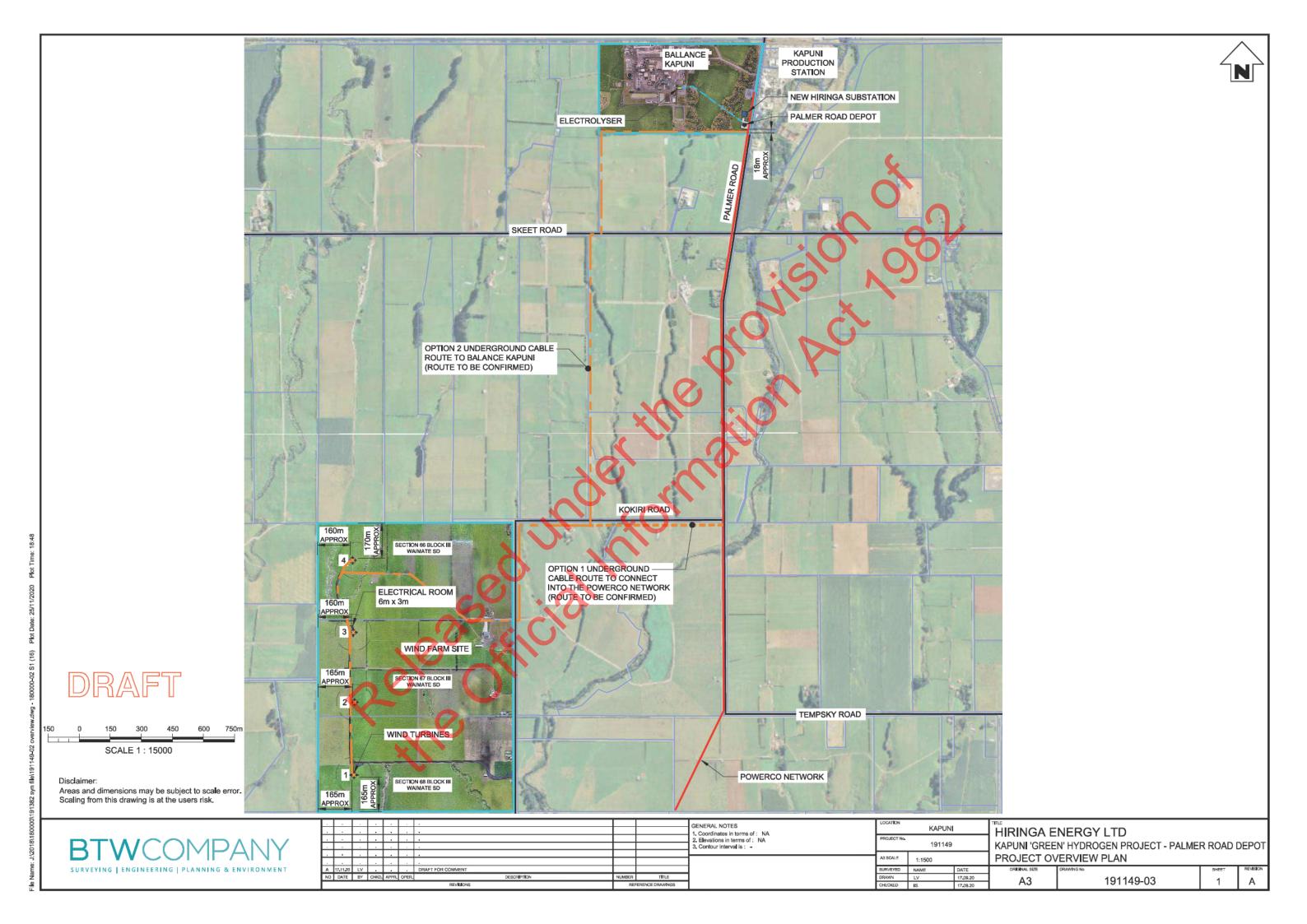
Cam Twigley

Director, Planning and Environment

(on behalf of Hiringa Energy Ltd and Ballance Agri-nutrients Ltd)

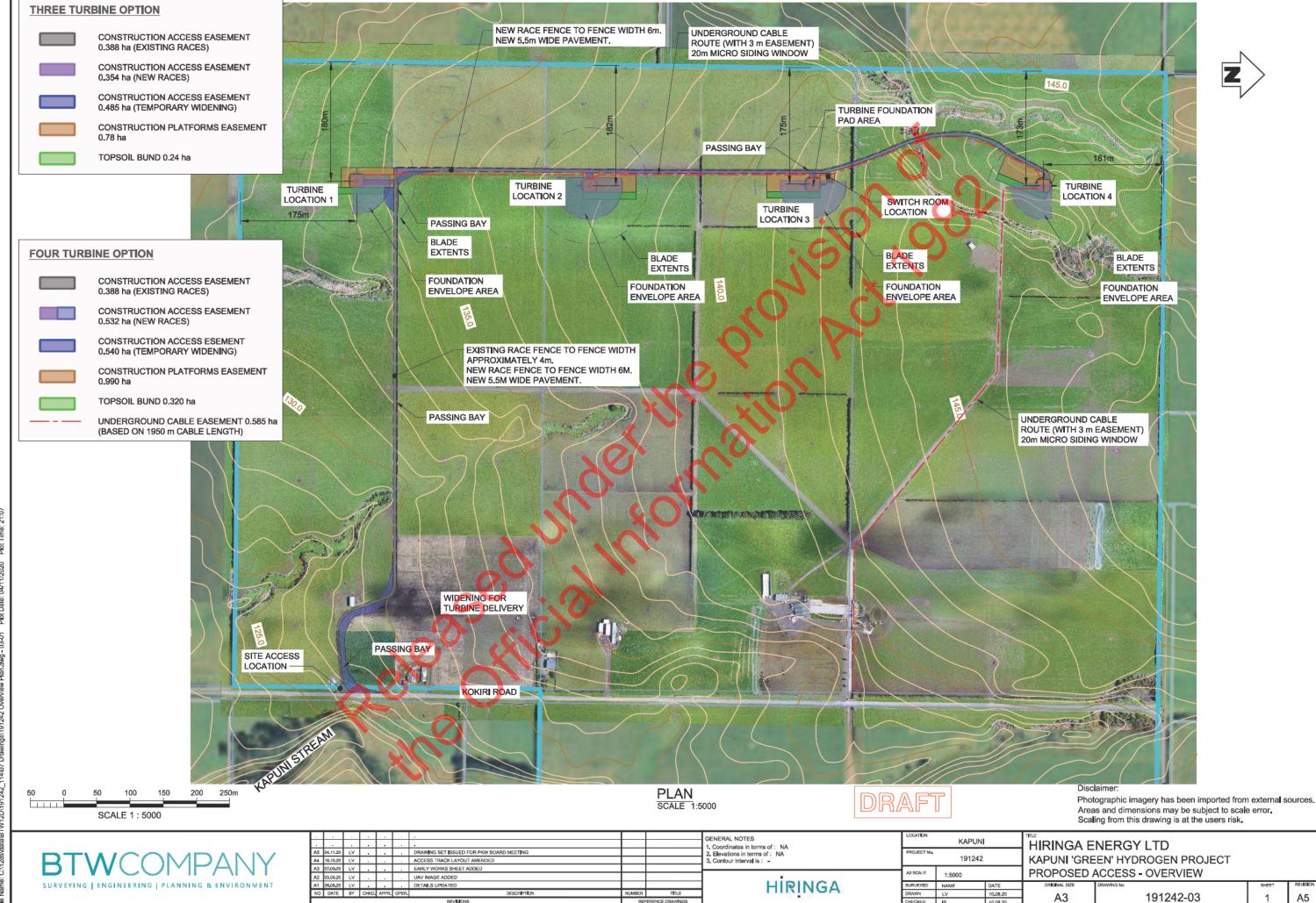
APPENDIX A LOCALITY PLAN





APPENDIX B SITE LAYOUT PLANS





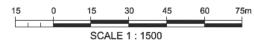
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Disclaimer

Areas and dimensions may be subject to scale error. Scaling from this drawing is at the users risk.



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APPENDIX C TURBINE DIMENSIONS



