# Draft consent conditions – Taumatatotora Consent Variation Application

# WDC Post Hearing version 30 November 2023

# Changes are indicated by:

- Strikethrough (showing amendments to 2011 consent);
- Additional text agreed with applicant; or
- Additional text responding to the Department of Conservation's version of the consent conditions dated and filed 24.11.23 - as agreed with applicant.

# 5.00 pm version

In consideration of Section 104, and pursuant to Sections 104B and 108 of the Resource Management Act 1991, the Waitomo District Council grants consent to Taumatatotara Wind Farm to construct and operate a utility scale wind farm comprised of a maximum of 8 22 horizontal axis turbines and associated substation buildings, earthworks and access roads and activities as described in Conditions (1) and (2) below for the purpose of generating electricity, on a Rural Zoned site located at Taumatatotara West Road, Taharoa, legally described as:

- Part Section 10 Block V Kawhia South Survey District and Section 3 Survey Office
   Plan 53968 comprised in Certificate of Title 141077;
- Section 3, Block IX Kawhia South Survey District comprised in Certificate of Title \$a28A/586
- Section 1 Survey Office Plan 58558 comprised in Certificate of Title SA47A/876;
- Section IA Block V Kawhia South Survey District comprised in Certificate of Title SA37A/25;
- Section 12 and Section 22 Block V Kawhia South Survey District comprised in Certificate of Title SA31C/23;
- Section 2 Block V Kawhia South Survey District comprised in Certificate of Title SA37A/26; and
- Part Section 24 Block V Kawhia South Survey District and Section 2 Survey Office
   Plan 53968 comprised in Certificate of Title SA48B/494;

subject to the following conditions:

## General

1. The wind farm development shall be constructed, operated and maintained in general accordance with the information, plans and drawings submitted with the application and received by Council on 23<sup>rd</sup> December 2005; and the additional information received on 30<sup>th</sup> January 2005 and 8<sup>th</sup> March 2005 except as otherwise amended by the s 127 application dated 21<sup>st</sup> November 2011 and the further information response dated 28<sup>th</sup> February 2012, Application To Change Consent Conditions dated 5 July 2020 and the Consent Variation Application dated 15 September 2023.

The application documentation comprises of:

- (a) Taumatatotara Windfarm Assessment of Environmental Effects, Volume 1 Main Report, dated March 2005;
- (b) Taumatatotara Windfarm Assessment of Environmental Effects, Volume 2 Book of Figures, dated March 2005.
- (c) Further information received 30th January 2005 and 8th March 2005.
- (d) Further Information provided in respect of the revised proposal approved as part of the change to the conditions of consent in accordance with Section 127 of the Resource Management Act 1991, namely:
  - i. Report dated 21st November 2011; titled 'Taumatatotara Windfarm Assessment of Environmental Effects for a Turbine Tip Height Increase', prepared by Ventus Energy (NZ) Ltd;
  - ii. Further information response dated 28th February 2012; titled 'Taumatatotara Windfarm Further Information for a Turbine Tip Height Increase', prepared by Ventus Energy (NZ) Ltd;
  - iii. Report dated 24th February 2012; titled 'Taumatatotara Wind Farm Landscape and Visual Assessment for S 92(1) Further Information Request', prepared by Opus International Consultants Ltd;
  - iv. Report dated 5<sup>th</sup> July 2020; titled 'Application To Change Consent Conditions', prepared by Taumatatotara Wind Farm Limited;
  - v. <u>The letter dated 15 September 2023, titled Update on Progress Taumatatotara Windfarm Limited (T4) Consent Variation Application, prepared by Gillian Chappell Foundry Chambers.</u>
- 1A. Where there is conflict between earlier and later information provided, the more recent information prevails; and where there is conflict between the general condition and specific conditions, the latter prevails.
- 2. For the purposes of this consent and for avoidance of doubt the activities authorised by this consent include:

- the installation, operation and maintenance of no more than twenty two (22) eight
   horizontal axis wind turbines ("turbines");
- (b) An underground fibre optic network connecting each turbine to the central control system in the on-site operations building(s);
- (c) Tracking and placement of an underground network of 33kV transmission lines delivering electricity from each turbine to the two on-site substations;
- (d) Overhead or underground powerlines connecting the on-site wind farm substations to the two existing 33kV lines that traverse the eastern edge of the landholding;
- (e) A fenced compound to house the on-site control building and sub-station equipment;
- (f) Earthworks associated with the creation of the turbine building platforms, access roads and other facilities described in items a) toe) above.
- (g) Widening and/or realignment works along parts of Taumatatotara West Road to enable the safe passage of the oversized wind farm components to the site.
- 3. The turbines shall have a maximum height measured from the ground to the top of the vertically extended blade tip (inclusive of a 17.5 metre clearance between the ground and the start of the blade) as follows:
  - (a) Turbines 1 to 3, 5, 6, 7, 8, 10 and 11 inclusive maximum height of 121.5 180.5 metres.
  - (b) Turbines 12 22 inclusive maximum height of 110 metres.
- 4. Each turbine shall be located within a turbine contingency zone of no greater than 100 metre radius from the turbine locations specified in the application. The turbine contingency zones shall avoid locations closer to external property boundaries, significant indigenous vegetation and significant habitats of indigenous fauna.
- 5. Prior to construction, the consent holder shall submit to the Manager Policy and Planning, Waitomo District Council for approval a plan specifying the final proposed locations of turbines 19 to 22 and a report outlining the reasons for the final locations. The locations of these turbines shall be chosen so that they are located as far as practicable back from the western ridgeline, taking into account geotechnical and other such location requirements, so as to minimise their visual impact as viewed from the west and south.
- 6. The consent holder shall submit to the Manager Policy and Planning, Waitomo District Council an as-built plan confirming the locations of all constructed turbines, access roads, entranceways, excess material fills, the substations and control building, the spare turbine component storage area, electricity transmission lines, and road upgrading/realignment works. The Plan shall also include but is not limited to:
  - (a) The finished line of cut and fill batters;

- (b) The finished edge line of pavement and seal widening works;
- (c) The location and dimensions of site entrances;
- (d) The finished level of access road centrelines;
- (e) The location, size and extent of all new stormwater drains or culvert extensions;
- (f) The location of all subsoil drains, sumps and manholes; and
- (g) Any underground services installed or altered as part of the works.

This plan shall be certified by a registered surveyor as to the accuracy at the completion of the work and is required to be submitted to Council within 6 months of the completion of construction of the wind farm.

## Cultural

## Cultural Observers

7. The Consent Holder shall engage Ngaati Mahuta ki te Hauaauru to act as cultural monitor/observer during all development phases of the wind farm project.

## **Powhiri and Cultural Induction**

- 8. The Consent holder shall invite Ngaati Mahuta ki te Hauaauru to organise a powhiri prior to the commencement of operations of the wind farm.
- 9. The Consent holder shall invite Ngaati Mahuta ki te Hauaauru to organise a cultural induction programme, to form part of the site induction, for all new staff, for all contractors constructing the wind farm, and for the operator of the wind farm.

## Accidental Discovery Protocol

10. If, at any time during Site Development Works, potential koiwi (human remains) or archaeological artefacts are discovered, then the earthworks or land disturbance within 10m of the discovery must cease immediately and the area secured. Ngaati Mahuta ki te Hauaauru shall be notified and be given 48 hours from the time of discovery to assess the site, including cultural considerations, and work will not recommence until Ngaati Mahuta ki te Hauaauru gives approval for work to continue.

## Noise

## Operational Noise

11. The noise from all other activities on the site (other than wind turbine generator operation and construction activities) shall not exceed the following limits when measured in accordance with the requirements of NZS 6801:1991 Measurement of Sound and assessed in accordance with the requirements of NZS 6802:1991 Assessment of Environmental Sound: The consent holder shall ensure that noise from sources on the site does not exceed the following noise limits:

7.00am to 7.00pm 45 dB L<sub>10</sub> L<sub>Aeq(15min)</sub>

7.00pm to 7.00am 35 dB L<sub>10</sub> L<sub>Aeq(15min)</sub>

7.00pm to 7.00am 60 dB LAFMAX

Noise shall be measured in accordance with NZS 6801:2008 and assessed in accordance with NZS 6802:2008.

- The consent holder shall ensure that, at the specified assessment positions, at any wind speed, wind farm noise levels do not exceed 40 dB Lago(10 min). Wind farm noise shall be measured and assessed in accordance with NZS 6808:2010. The Assessment Positions shall be outside at the locations marked 22, 23, 24 and 25 on Site Plan Manawatu Aerial Mapping version 1.5 (see Appendix 1.) The noise from the wind farm shall comply with the requirements of NZS6808:1998 Acoustics The Assessment and Measurement of sounds from Wind Turbine Generators in relation to any dwelling existing at the date of the granting of this consent, except:
  - A) Any dwelling on any site that forms part of the wind farm; and
  - B)—The dwellings labelled as H1, H2, H2A, H3 and H4 on the approved plans.
- 12. Prior to commencing any development of the wind farm, detailed ambient noise monitoring shall be undertaken within the notional boundary of any dwelling within the 30 dBA noise contour (other than the dwellings specifically referred to in (a) and (b) of condition 8 above) by a person suitably qualified and experienced in acoustics and accepted by the Manager, Policy and Planning, Waitomo District Council. The monitoring shall be undertaken to determine the existing background sound in terms of the requirements of NZS6808:1998 Acoustics The Assessment and Measurement of Sound from Wind Turbine Generators. Sufficient field measurements shall be undertaken to demonstrate to the satisfaction of Council's Manager, Policy and Planning, that the best fit regression curve gives an accurate representation of the existing noise environment. Prior to installation of the turbines, an assessment of the wind farm background sound level measurements shall be undertaken at any Assessment Position within the 30dBA noise contour. Measurements shall be undertaken in accordance with Section 7.4 of NZS6808: 2010 Acoustics. If no Assessment Positions have predicted noise levels above 30 dB L<sub>A90</sub>, measurements shall be performed at two of the Assessment Positions to the satisfaction of Council's Manager, Policy and Planning. Background sound level measurements shall be taken within a three (3) week period where no construction activities are undertaken. A report of measured noise levels shall be prepared in accordance with Section 8.2 of NZS6808:2010 and this report shall be submitted to the Council's Manager, Policy and Planning, Waitomo District Council.
- 14. Prior to commencing any development of the wind farm, the consent holder shall prepare a noise report to demonstrate, to the satisfaction of Council's Manager, Policy and Planning, that the wind farm will comply with the requirements of NZS6808:1998. This report shall be prepared by a person suitably qualified and experienced in acoustics and accept by the Manager, Policy and Planning, Waitomo District Council. installation of the turbines, a prediction report shall be submitted to the Council's Manager, Policy and Planning, in accordance with Section 8.4.2 of NZS6808: 2010. That prediction shall be based

on the highest sound power level of the turbine to be installed and include results for both NZS 6808: 2010 and IoA GPG methods.

15. The wind turbines shall not exceed a rotor tip height of 110 metres above ground level and have a sound power level of greater than 107.2 dB Lwa unless it can be demonstrated by a person specialising in acoustics and accepted by the Manager, Policy and Planning, Waitomo District Council that higher turbine heights or sound power will still comply with the requirements of NZS6808:1998. A certificate confirming the sound power level shall be included in the prediction report required by condition 14.

Construction Noise

- 16. Noise from all construction and decommissioning work including (but not limited to):
  - a. Public road upgrades between SH37 and the site;
  - b. Site works:
  - c. Wind turbine generator assembly and placement;
  - d. Concrete placement;
  - e. Wind turbine removal: and
  - f. Land reinstatement

shall be measured and assessed in accordance with the requirements of NZS6803:1999 Acoustics – Construction Noise. The noise limits shall be those set out in Table 2 of NZS6803 for works of "long-term" duration (the levels for long term construction work are reproduced in the table below) and shall comply with the noise limits in the Table below:

Time	Weekdays		Saturdays		Sundays	
	L <sub>Aeq</sub>	L <sub>AFmax</sub>	L <sub>Aeq</sub>	L <sub>AFmax</sub>	L <sub>Aeq</sub>	L <sub>AFmax</sub>
0630-0730	55dB	75dB	45dB	75dB	45dB	75dB
0730-1800	70dB	85dB	70dB	85dB	55dB	85dB
1800-2000	65dB	80dB	45dB	75dB	45dB	75dB
2000-0630	45dB	75dB	45dB	75dB	45dB	75dB

- 17. No concrete trucks shall be permitted to enter the site before 7.00am or leave the site after 7.00pm.
- 18. Prior to the commencement of construction, a Construction Noise Management Plan shall be prepared to the satisfaction of the Manager, Policy and Planning, Waitomo District Council. The Construction Noise Management Plan shall demonstrate how the requirements of condition 12 shall be achieved. At least 30 working days prior to the commencement of construction works authorised by this consent, the consent holder shall submit a Construction Noise Management Plan (CNMP) to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives in condition 18 (a) to (b). The CNMP shall be prepared by a suitably qualified and experienced

## person and shall provide for the following objectives:

- a) <u>Designed and implemented to comply with the requirements of NZS6803:1999</u> Acoustics – Construction Noise, and
- b) Implemented in accordance with the requirements of section 16 of the Resource Management Act 1991, so as to adopt the best practicable option to ensure the emission of noise from construction works does not exceed a reasonable level.
- 19. The Construction Noise Management Plan shall address, amongst other things, the potential noise effects of construction traffic on the roads and techniques to minimise these effects. Any night time (10.00 pm to 7.00 am) traffic movements must be included in the evaluation.

## *Noise Monitoring:*

- 20. Within six months of the commencement of operation of the wind farm becoming fully operational, the noise levels shall be measured and results provided to the Manager, Policy and Planning, Waitomo District Council. at all Assessment Positions where, in the condition 14 report, predicted noise levels are greater than 30 dB L<sub>A90</sub>. If no Assessment Positions have predicted noise levels above 30 dB L<sub>A90</sub>, measurements shall be performed at the same locations measured in condition 13. If access is denied, alternate locations are to be proposed to the satisfaction of the Manager, Policy and Planning, Waitomo District Council. Within one month of completion of the surveys, a compliance assessment report shall be submitted to the Manager, Policy and Planning, Waitomo District Council in accordance with section 8.4.1 of NZS 6808:2010.
- 21. The consent holder shall pay all costs associated with noise compliance measurements, monitoring and reporting.

## Traffic and Roading

## Construction Programme

- A Construction Programme shall be prepared by the consent holder and submitted to the satisfaction of the Manager, Policy and Planning, Waitomo District Council prior to any construction works commencing. The Construction Programme shall include the following:
  - a. The hours of construction work on Taumatatotara West Road and other Waitomo District Council administered roads shall be between 7.00am and 7.00pm Monday to Saturday (excluding public holidays), unless written approval is otherwise obtained from the Manager, Policy and Planning, Waitomo District Council to work outside of these hours;
  - b. Provision shall be made to maintain adequate and safe access to and from individual properties along Taumatatotara West Road and other Waitomo District Council administered roads while transportation movements are undertaken; and
  - c. The consent holder shall arrange to hold a copy of all Resource Consents on site at all times during construction.

## Traffic Management Plan

A Traffic Management Plan shall be prepared by the consent holder and submitted to the satisfaction of the Manager, Policy and Planning, Waitomo District Council prior to any construction works commencing. The Traffic Management Plan shall be prepared in accordance with the latest edition of the Transit New Zealand Code of Practice for Temporary Traffic Management and shall include but not be limited to:

- A) The transport route (in general accordance with the route proposed in the application);
- B)—Times and locations when deliveries are prohibited;
- C) Piloting and traffic management procedures;
- D)—Contingency plans for breakdowns, bridge or pavement failure, severe weather conditions, accidents or roadworks;
- E) Provisions for coordination with other parties, including emergency services;
- F) Provisions to maintain adequate and safe access to and from individual properties along Taumatatotara West Road and other Waitomo District Council administered roads while transportation movements are being undertaken; and
- G)—A construction timetable, detailed vehicle movements to and from the site, and the hours that the trucks will operate.
- 23. At least 30 working days prior to the commencement of construction works authorised by this consent, the consent holder shall submit a Traffic Management Plan to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives in condition 24 (a) to (e). The objectives of the Traffic Management Plan shall be to:
  - a. Ensure all specific legislative requirements and consent conditions in relation to construction traffic are adhered to;
  - b. Encourage a culture of road safety awareness and commitment;
  - c. Ensure best practice in transport safety;
  - d. Ensure emergency services are not obstructed.
  - e. <u>Minimise disruption to the surrounding community, farming operations and rural</u> services; and
  - f. Keep the local community informed of construction operations.
- 24. <u>In order to achieve the objectives established in condition 23 above, the TMP shall, as a minimum, address the following matters:</u>
  - a. The transport route (in general accordance with the route proposed in the application);

- b. Times and locations when deliveries are prohibited;
- c. Piloting and traffic management procedures;
- d. Contingency plans for breakdowns, bridge or pavement failure, severe weather conditions, accidents or roadworks;
- e. Provisions for co-ordination with other parties, including emergency services;
- f. Provisions to maintain adequate and safe access to and from individual properties along Taumatatotara West Road and other Waitomo District Council administered roads while transportation movements are undertaken; and
- g. A construction timetable, detailing vehicles movements to and from the site, and the hours that the trucks will operate.
- h. The construction programme and the associated traffic volumes estimated for each construction phase;
- i. Provisions to ensure that at all times during construction, all Waitomo District Council administered roads are kept open. In exceptional circumstances a request may be sought for short term road closures. Any road closures shall be approved by the Manager, Policy and Planning, Waitomo District Council.
- j. The ongoing review of the contents of the TMP throughout the period of the construction works to ensure it remains fit for purpose.
- 25. If traffic control measures are not carried out in accordance with the Traffic Management Plan and the Transit New Zealand Code of Practice for Temporary Traffic Management, the Waitomo District Council reserves the right after notifying the consent holder or contractors either verbally or in writing, to instruct the consent holder or contractors to cease all work until the requirements of this TMP and Code of Practice are met. Alternatively the Manager, Policy and Planning, Waitomo District Council, may arrange for the traffic management to be carried out by others, the costs of which will be borne by the consent holder.

#### Roading Design

- 26. The consent holder shall provide, to the satisfaction of the Manager, Policy and Planning, Waitomo District Council, pavement deflection data for relevant sections of Waitomo District Council roads that are to be utilised for the transportation of construction materials and turbine components both before and after the construction period. The pavement deflection measurements shall be carried out using either Falling Weight Deflectometer or Benkelman Beam testing techniques.
- 27. The consent holder shall provide, to the satisfaction of the Manager, Policy and Planning, Waitomo District Council, bridge inspection findings and details of axle loadings resulting from the transportation of the turbine components, to verify that all Waitomo District Council bridges are able to accommodate the transportation of these loads without resulting in any damage. If the Manager, Policy and Planning, Waitomo District Council

- considers it to be necessary, Council may require the consent holder to provide an appropriate level of supervision of heavy loads across Waitomo District Council bridges.
- 28. Detailed roading design plans for internal site access roads, Taumatatotara West Road, and any other Waitomo District Council roads that are subject to upgrading or realignment works, shall be developed in accordance with appropriate construction standards and submitted to the satisfaction of the Manager, Policy and Planning, Waitomo District Council prior to construction commencing. The detailed design shall include:
  - a. Geotechnical investigation and interpretation report;
  - b. Comer widening design (including cut/fill batters details);
  - c. Taumatatotara West Road/ Taharoa Road intersection design;
  - d. Pavement design;
  - e. Surfacing details;
  - f. Shoulder feather-edge details;
  - g. Drainage (surface water channels and culverts);
  - h. Safe stopping sight distance; and
  - i. Minimised cut earthworks for the construction of the internal access roads.

#### Road Maintenance

- 29. A maintenance regime covering all Waitomo District Council roads and bridges to be utilised for transportation of construction materials and turbine components shall be prepared by the consent holder and submitted to the satisfaction of the Manager, Policy and Planning, Waitomo District Council prior to any construction works commencing. The maintenance regime shall cover the full construction period and may be developed in partnership with an ongoing maintenance programme (shared with the Waitomo District Council's own Network Maintenance Contractors). The maintenance regime shall ensure the following:
  - a. During the construction period, the consent holder shall undertake any necessary works to ensure that the roads and bridges utilised for transportation of construction materials and turbine components are maintained at a quality no less than the quality of the road and bridges prior to construction commencing.
- 30. A bond of \$134,000 shall be paid to Council to secure the ongoing performance of condition 25 with regard to Taumatatotara West Road maintenance only, pursuant to section 108(2)(b) and section 108A of the Resource Management Act 1991. The bond applies to regular maintenance only, not pavement rehabilitation and shall be refunded to the consent holder at such a time as the Manager, Policy and Planning, Waitomo District Council is satisfied that the objectives of the maintenance regime required by condition 25, as it relates to Taumatatotara West Road, has been met. Should the Manager, Policy and

Planning, Waitomo District Council consider the consent holder is not meeting the objectives of the maintenance regime with regard to the maintenance of Taumatatotara West Road, the bond will be utilised to undertake the work.

#### Access

- 31. Detail of vehicle access points and permanent entranceways along Taumatatotara West Road shall be provided prior to construction works commencing. The details will include allowances for:
  - a. Pavement widening to a minimum 6.5 metre sealed width;
  - b. Bellmouth radii to a minimum 15 metres;
  - c. Entranceway culverts to a minimum 300mm diameter; and
  - d. Pavement surfacing to a minimum 70 metres at full width, with matching in tapers at 1 in 10.
- 32. All internal access roads shall be a minimum of 5 metres in width.

## Landscaping and Visual

- 33. At least 30 working days prior to the commencement of construction works authorised by this consent, the consent holder shall submit a Landscape Management Plan to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives in condition 34 (a) to (e). The objectives of the Landscape Management Plan shall be to:
  - a. Ensure all consent conditions in relation to landscaping are adhered to:
  - b. Encourage the restoration of all disturbed landforms not in permanent site infrastructure (such as roading, turbine pads, site buildings) so as to integrate them into the surrounding contours as much as practicable;
- 34. <u>In order to achieve the objectives established in condition 33 above, the Landscape Management Plan shall, as a minimum, address the following matters:</u>

Prior to construction commencing the consent holder shall submit to the satisfaction of the Manager, Policy and Planning, Waitomo District Council, a Landscape Mitigation Plan prepared by a suitably qualified Landscape Architect. The Landscape Mitigation Plan shall detail the visual mitigation and landscape restoration strategies that will be undertaken and shall include but not be limited to:

- a. A plan showing the Details of planting and landscaping to be undertaken around the substation, control building and spare turbine part storage area;
- b. A plan showing the Details of the height and location of any earth bunds or mounds created for visual, noise, or mitigation purposes;
- c. Details of topsoil stockpile and management plan for all topsoil stockpiled for more

than six months from the time of stripping;

- d. The restoration strategy for any disturbed landforms including:
  - i. Permanent earthworks, including all road cuttings;
  - ii. Temporary earthworks, including construction pads; and
  - iii. Topsoil restoration.
- e. The manner in which the restoration will integrate the new landform into the natural contours, and revegetate (with either pasture or planting) so it appears homogenous with the surrounding landscape;
- f. Details of an implementation strategy identifying when the mitigation works will be undertaken;
- g. Details of a maintenance schedule.

The colour of the turbines shall be selected to minimise the visual impact. Due consideration will be given to the predominant ambient background sky colour in selection of the final colour. Low reflectivity finishes shall be used on the turbines and the turbine blades where practicable.

# Decommissioning and Site Remediation

- 35. All "dead" turbines and turbine components shall be removed within one month from the time that they ceased to function, unless exceptional circumstances exist and written approval is obtained from Manager, Policy and Planning, Waitomo District Council.
- 36. Upon decommissioning of the wind farm, all visible structures (including turbines, substations and hard stand areas) shall be removed from the site. All foundations shall be buried under a minimum of two metres of soil and revegetated, unless otherwise approved by the Manager, Policy and Planning, Waitomo District Council.
- 37. <u>Ngaati Mahuta ki te Hauaauru shall be invited to contribute to any proposal to remove turbines and associated structures from the site to ensure the materials are disposed of in an environmentally sustainable manner.</u>

## Air Safety

- 38. One month prior to commencing installation of the turbines the consent holder shall provide to the Manager, Policy and Planning, Waitomo District Council for certification, a copy of a determination from the Civil Aviation Authority (CAA) authorising construction of the windfarm to the maximum tip height.
- 39. Those turbines identified as numbers 1, 5, and 10, <del>18 and 22</del> and any other turbines as identified by the CAA (and identified below) shall be lit with a medium intensity obstacle light located on the highest practicable point, sufficient to indicate to aircraft the general

location of the wind farm.

Turbine ID	Easting	Northing	Attitude
1	2664848	6331439	251m AMSL
5	2665338	6330549	322m AMSL
10	2666640	6329258	319m AMSL
<del>18</del>	<del>2667836</del>	6327401	<del>367m AMSL</del>
<del>22</del>	<del>2668272</del>	<del>6326391</del>	<del>321m AMSL</del>

- 40. The medium intensity obstacle lights shall:
  - be red; and
  - have an effective intensity of not less than 1600 cd of red light;
  - be visible to aircraft approaching the wind farm from any direction; and
  - shall be installed and operated in a way that minimise their visibility to persons on the ground while meeting CAA requirements.

#### Geotechnical

In accordance with the recommendations of the geotechnical review prepared by Riley Consultants, and submitted with the application (Appendix K of Volume One), the consent holder shall undertake subsurface geotechnical investigation and engineering geological mapping for the wind farm area, to ensure that all of the turbine sites are geotechnically feasible, and provided with stable building platforms. The results of these investigations and detailed design of the proposed geotechnical foundation works for each of the turbines shall be provided for the <a href="mapproval certification">approval certification</a> of the Manager, Policy and Planning, Waitomo District Council prior to construction commencing.

#### Baseline studies

**Avifauna Population Monitoring Plan (APMP)** 

42. <u>Prior to construction of the first turbine<sup>1</sup>, the Consent Holder shall engage a suitably qualified avifauna expert (SQEP) to prepare and submit an Avifauna Population Monitoring</u>

Prior to construction of the first turbine means prior to undertaking all civil construction activity associated with the turbines, including the development of the internal roading network across the site.

<u>Plan (APMP) for certification by the Manager, Policy and Planning Waitomo District</u> <u>Council. The objective of the APMP shall be:</u>

- a) to provide baseline information identifying the presence or otherwise of Threatened and At Risk avifauna species including NZ falcon (Sept to Feb) and cryptic marshbirds (Sept to Nov).
- 43. The APMP shall include (but not be limited to) the following:
  - a) Details of the methodology proposed for undertaking the baseline survey; and
  - b) Methods for monitoring NZ falcon (Sept to Feb) and cryptic marshbirds (Sept to Nov);
- 44. The methodology for survey and monitoring shall be developed in consultation with the Department of Conservation. A monitoring season may occur in the same calendar year (eg NZ falcon may be monitored January, February, September December in the same year.).
- 45. At least (15) working days prior to the APMP being submitted for certification the Consent Holder shall provide a copy of the draft APMP to the following persons and invite their views on it:
  - a) <u>Te Ruunanga o Ngaati Mahuta ki te Hauaauru;</u>
  - b) The Department of Conservation.
- 46. If no response is received within 15 working days, the Consent Holder shall provide a copy of the APMP to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives and measures specified in conditions 42 and 43. Any comments received on the APMP and how they were addressed shall be included in the APMP.

## **Bat Population Monitoring Plan (BPMP)**

47. Prior to construction of the first turbine<sup>2</sup>, the Consent Holder shall engage a suitably qualified and experienced bat expert (SQEB) to prepare and submit a Bat Population

<sup>&</sup>lt;sup>2</sup> Prior to construction of the first turbine means prior to undertaking all civil construction activity associated with the turbines, including the development of the internal roading network across the site.

Monitoring Plan (BPMP) for certification by the Manager, Policy and Planning, Waitomo District Council. The objective of the BPMP shall be as follows:

- a) To identify how bats are using the Bat Study Area;
- b) To assess the risks of the turbines on bats;
- c) <u>To generate robust baseline monitoring data to inform the Bat Post Construction Monitoring Plan (BPCMP);</u>
- 48. The BPMP shall include (but not be limited to) the following:
  - a) <u>Details of the methodology proposed for undertaking the baseline surveys including the use of monitors.</u>
  - b) A map showing the Bat Study Area and the locations of bat monitoring sites including each turbine location, non-turbine sites, potential bat flyways, and habitat features such as saddles and bush edges.
  - c) <u>Details explaining the proposed locations for monitoring within the Bat Study Area and reasons why these sites have been chosen.</u>
  - d) <u>Details of the analysis and reporting required of the data obtained from the survey work.</u>
  - e) Details regarding the number of monitoring sessions proposed to be undertaken and when these will occur during the year. As a minimum, this shall include a monitoring session during each of the three following stages of the bat breeding season:
    - a. <u>pre-breeding (October to November)</u>;
    - b. <u>breeding (December to February); and</u>
    - c. post-breeding (March to April).
  - f) The monitoring session may occur in the same calendar year (eg monitoring may take place in January, February, December in the same year). Bat monitoring data must be obtained for all monitoring sites for a minimum of 10 valid survey nights as defined in the Bat Roost Protocol v2 October 2021.
- 49. The Consent holder shall consult with the Department of Conservation in preparation of the BPMP. At least (15) working days prior to the BPMP being submitted for certification, the Consent Holder shall provide a copy of the draft BPMP to the following persons and invite their views on it:
  - a) <u>Te Ruunanga o Ngaati Mahuta ki te Hauaauru;</u>
  - b) The Department of Conservation.
- 50. If no response is received within 15 working days, the Consent Holder shall provide a copy of the BPMP to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives and measures specified in conditions 47 and 48. Any

comments received on the BPMP, and how they were addressed by the Consent Holder shall be included in the BPMP.

Approval of Avifauna Population Monitoring Plan (APMP) and Bat Population Monitoring Plan (BPMP)

51. The Consent Holder shall provide a copy of the APMP and BPMP to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives and measures specified in conditions 42, 43, 47 and 48, ten working days prior to the baseline surveys being carried out. The baseline studies may not commence until the APMP and BPMP have been certified by the Council.

## Post Construction Monitoring

## Avifauna Mortality Monitoring Plan (AMMP)

- 52. The results of the Avifauna Population Monitoring Plan (APMP) required by Condition 42 shall determine (in consultation with the Department of Conservation) if there are any Threatened or At Risk bird species that may require post-construction mortality monitoring. If it is determined that post-construction mortality monitoring is required, an Avifauna Mortality Monitoring Plan (AMMP) shall be prepared by the consent holder in consultation with the Department of Conservation.
- 53. The objectives of the AMMP shall be:
  - a) <u>To establish the methods required to detect turbine related mortalities of Threatened or At Risk species.</u>
  - b) To determine whether any Threatened or At Risk species are being adversely affected by the operation of the wind farm.
- 54. The draft AMMP methodology shall include the following:
  - a) Methods and frequency of mortality searches around turbines.
  - b) Any evidence of turbine strike (species, date, weather conditions and other relevant observations) and notes of avoidance behavior.
- 55. At least 30 working days prior to the draft AMMP being submitted for certification, the Consent Holder shall provide a copy of the draft AMMP to the following persons and invite their views on it:
  - a) <u>Te Ruunanga o Ngaati Mahuta ki te Hauaauru;</u>
  - b) The Department of Conservation.
- 56. If no response is received within 30 working days, the Consent Holder shall provide a copy of the AMMP to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives and methods specified in conditions 53 and 54. Any comments received on the plan and how they were addressed by the Consent

Holder shall be included in the plan. The AMMP shall be implemented immediately following the commissioning of the windfarm.

## **Bat Post Construction Monitoring Plan (BPCMP)**

57. The results of the BPMP shall be analysed and interpreted by the SQEB to determine (in consultation with the Department of Conservation) whether the levels of bat activity require post-construction monitoring. At any turbine for which the baseline activity levels exceed an average of 1 bat pass per night over the baseline survey, then the Consent

- holder shall identify any reasonable measures to give effect to the objectives of the plan as set out in condition 59 below.
- 58. If it is determined that post-construction monitoring is required, a Bat Post Construction Monitoring Plan (BPCMP) will be prepared prior to the commissioning of all turbines by the consent holder, in consultation with the Department of Conservation.
- 59. The objectives of the BPCMP shall be:
  - a) To provide a statistically robust monitoring programme of bat activity post construction.
  - b) To determine whether bats are being adversely affected by the operation of the wind farm.
- 60. The BPCMP shall include the following:
  - a) A review of the results of the baseline surveys carried out for the BPMP;
  - b) The deployment of automated bat detectors on all 8 turbines at 15 metre height and at least 8 non-turbine sites. Results are to be analyzed in relation to wind speed and temperature when monitoring data have been obtained for each of the stages of the bat breeding season as listed in 48(e);
  - c) Consideration of a requirement for bat mortality monitoring and if required, methodologies for recording and reporting bat mortality rates. Should the post construction monitoring identify an average of 10 bat passes per night over any one seasonal monitoring session at an operating turbine site, then mortality monitoring shall be undertaken at those specific turbines to determine mortality rates.
- 61. Monitoring under the BPCMP shall be implemented for a minimum period of five years with results reported annually over each of those five years.
- 62. At least 30 working days prior to the draft BPCMP being submitted for certification, the Consent Holder must provide a copy of the draft BPCMP to the following persons and invite their views on it:
  - a) <u>Te Ruunanga o Ngaati Mahuta ki te Hauaauru;</u>
  - b) <u>The Department of Conservation.</u>
- 63. If no response is received within 30 working days, the Consent Holder shall provide a copy of the BPCMP to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives and measures specified in conditions 59 and 60. Any comments received on the plan and how they were addressed by the Consent Holder shall be included in the plan. The BPCMP shall be implemented immediately following the commissioning of the windfarm.

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#### **Bat Mitigation, Offset or Compensation Plan (BMOCP)**

- 64. <u>If any monitoring under the BPCMP finds a significant adverse effect, the consent holder shall develop a Bat Mitigation, Offset or Compensation Plan (BMOCP) in conjunction with a SQEB and in consultation with the Department of Conservation.</u>
- 65. The objective of the BMOCP is to identify methods and options to mitigate, offset or compensate for the adverse effects identified by the monitoring under the BPCMP.

  Specifically excluded from a plan will be any modification or restriction on the operation of the wind turbines.
- 66. At least (30) working days prior to the BMOCP being submitted for certification, the Consent Holder must provide a copy of the BMOCP to the following persons and invite their views on it:
  - a) <u>Te Ruunanga o Ngaati Mahuta ki te Hauaauru;</u>
  - b) The Department of Conservation.
- 67. If no response is received within 30 working days, the Consent Holder shall provide a copy of the BMOCP to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives specified in condition 65. Any comments received on the BMOCP and how they were addressed shall be included in the BMOCP.
- 68. Where the Consent Holder does not agree with recommendations proposed by the BMOCP or the Bat Monitoring Review Report prepared under condition 70, the Council may serve notice on the Consent Holder under s128 of the Resource Management Act 1991 (or its replacement legislation) of its intention to review the conditions of this resource consent for the purpose of:
  - a) Applying ecological mitigation, offsetting or compensation conditions to deal with any adverse effect on the environment arising from the exercise of the consent, or
  - b) Reviewing the methodology of the BPCMP.
- 69. Where the Consent Holder agrees to the recommendations of the BMOCP these will be implemented as soon as reasonably practicable after certification and the results will be provided to the Department of Conservation, Waitomo District Council and Te Ruunanga o Ngaati Mahuta ki te Hauaauru.

## Bat Monitoring Review Report – BMRR

70. On the fifth anniversary of the date after any wind turbine first generates electricity, the Consent Holder shall commission a review of the BPCMP and produce a Bat Monitoring

Review Report (BMRR), to be prepared by a suitably qualified and experienced bat expert and biostatistician. The objective of the BMRR shall be:

- a) To review the results of the monitoring required in accordance with the BPCMP;
- b) To consider whether the monitoring in accordance with the BPCMP needs to continue, be improved and if so at what frequency and with what methods, including having regard to the activity level triggers identified in condition 60 (c).
- c) To consider whether any mitigation, recommended in the BPCMP, is appropriate for implementation by the Consent Holder.
- 71. At least (30) working days prior to the draft BMRR being submitted for certification, the Consent Holder must provide a copy of the draft BMRR to the following persons and invite their views on it:
  - a) <u>Te Ruunanga o Ngaati Mahuta ki te Hauaauru;</u>
  - b) <u>The Department of Conservation.</u>
- 72. If no response is received within 30 working days, the Consent Holder shall provide a copy of the BMRR to the Manager, Policy and Planning, Waitomo District Council for certification that the plan meets the objectives specified in condition 70. Any comments received on the BMRR and how they were addressed shall be included in the BMRR. Any recommendations in the BMRR will be implemented as soon as reasonably practicable after certification.

## Strike response

- 73. Any unidentified bird or bat species remains recovered shall be referred to the Department of Conservation for identification as soon as is practicably possible following their discovery.
- 74. The consent holder shall record and report any evidence of bird or bat strikes detected post-construction. Should a bird or bat species listed in the Department of Conservation's most current threat classification system as Threatened or At Risk at the time be found injured or dead at the site, the Director General of Conservation and the Waitomo District Council is to be notified immediately and the bird or bat provided to the Director General of Conservation or its nominated agent for autopsy or rehabilitation.
- 75. The consent holder shall forward bat records to the Department of Conservation.

## **Further investigation**

76. The consent holder will commit the sum of \$45,000 per year for 5 years from the commission of the turbines to support an investigation of bat populations in the geographical area running from Marokopa, Te Anga, Te Waitere and Taharoa. This will be offered by the consent holder through a University research scholarship or other

equivalent mechanism in consultation with the Waitomo District Council and the

Department of Conservation. The consent holder will provide to the Manager Policy and

Planning, Waitomo District Council evidence of the offer of the scholarship or other

equivalent mechanism on the anniversary of the commissioning of the turbines for the

duration of this condition.

[Advice Note: Condition 76 has been offered by the Consent Holder and it has agreed to be bound by this in accordance with the principle in Augier. If the scholarship or other mechanism is not taken up by a third party the consent holder will have complied with this condition, provided the scholarship or equivalent mechanism has been offered].

## Register

The consent holder shall keep a register or observations of effects of the wind farm activities on wildlife. This will include evidence of turbine strike (with species, date, weather conditions and other relevant observations), notes of avoidance behaviour observed, and other observed interaction of wildlife with the wind farm. Ground inspections with nil results should also be recorded. The register shall also be maintained for the life of the consent and shall be made available to Council within 2 working days of its request.

## Inspections

In accordance with condition 37 above, all wind farm personnel will inspect the area around the turbine bases when visiting or passing by a turbine, throughout the life of the consent, for evidence of wildlife mortality.

The consent holder shall undertake dedicated inspections of all turbine bases for evidence of wildlife mortality at monthly intervals for the first two years of operation. If construction is staged, later turbines shall also continue to be inspected for a full two years.

If no significant adverse effects on wildlife are evident, then dedicated inspections shall be discontinued, with the prior approval of the Manager, Policy and Planning, Waitomo District Council.

If a significant adverse effect is found (through dedicated monitoring or other monitoring) then monthly inspections shall continue in the interim and a plan developed, to the satisfaction of the Manager, Policy and Planning, Waitomo District Council and in consultation with the Department of Conservation, acting reasonably, to address the effects. Such a plan shall propose a monitoring regime and identify methods and options to avoid, remedy or mitigate the adverse effects.

Specifically excluded from a plan will be any modification or restriction on the operation of the turbines.

## Reporting

77. An annual report, detailing the information required in conditions 52, 58, 64, 70 & 75<sup>3</sup> above shall be provided to Waitomo District Council and the Department of Conservation. Any unidentified species remains recovered shall be referred to the Department of Conservation for identification as soon as is practically possible following their discovery.

#### **Bird Perches**

- 78. No telecommunications devices or signs shall be connected/attached to any part of the turbines and/or the accessory structures.
- 79. With the exception of the transmission lines connecting the substation to the existing transmission lines, all other intra project lines within the wind farm shall be underground.
- 80. The turbine towers shall be tubular in design.

#### **Native Vegetation**

81. The clearance and trimming of native vegetation associated with the wind farm activities shall be restricted to the minimum area required to undertake the road realignment works, and any realignments of the power line routes. In particular, the consent holder shall avoid the removal of pole stand Rimu where practicable. Any tree removal must be undertaken in accordance with 'Protocols for minimising the risk of felling bat roosts' (version 2 October 2021 or the most recent version available).<sup>4</sup>

The consent holder shall develop and implement a weed control programme for the site and access roads, to the satisfaction of Council, and for the first 2 years of operation.

#### Communications

82. In the event that the wind farm activities result in any disruption to free to air (not satellite) television, Broadband Wireless access licenses and/or microwave path operators at those properties in the area surrounding the wind farm site, the consent holder shall assist those parties to obtain reception comparable to the pre-construction quality, to the satisfaction of Council. The consent holder shall advise the Manager Policy and Planning, Waitomo District Council of the agreed mitigation measures in writing.

<sup>&</sup>lt;sup>3</sup> <u>52 = Avifauna Mortality Monitoring Plan, 58 – Bat Post Construction Monitoring Plan, 64 – Bat Mitigation, Offset or Compensation Plan, 70 – Bat Monitoring Review Report, 75 – Bat Records.</u>

<sup>&</sup>lt;sup>4</sup> Protocols for minimising the risk of felling bat roosts Oct 2021.pdf (doc.govt.nz)

## Complaints Register

- 83. The consent holder shall appoint a representative who shall be the Waitomo District Council's principal contact person in regard to matters relating to this resource consent. The consent holder shall inform the Manager Policy and Planning, Waitomo District Council of the representative's name and how they can be contacted prior to this resource consent being commenced.
- 84. The consent holder shall maintain a complaints register for the wind farm activities. The register shall record all complaints received and shall include:
  - a. The date, time and duration of the incident that has resulted in the complaint;
  - b. The location of the complainant;
  - c. The cause of the incident where appropriate;
  - d. Any corrective action undertaken by the consent holder in response to the complaint.

The register shall be available to Council within 2 working days of its request.

## Implementation, Review and Monitoring

- 85. Pursuant to sections 128 to 130 of the Resource Management Act the Waitomo District Council may undertake a review of conditions of consent, within twelve months of the commencement of operation of the wind farm and thereafter on an annual basis for the following purpose:
  - a. to review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment from the exercise of this resource consent (in particular the potential adverse environmental effects in relation to <u>ecological effects</u>, noise, vegetation removal, earthworks, and the visual, landscape and amenity effects), and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or
  - b. to address any adverse effect on the environment which has arisen as a result of the exercise of this consent; or
  - c. if necessary and appropriate, to require the holder of this resource consent to adopt the best practicable option to remove or reduce adverse effects on the surrounding environment; or
  - d. to review the adequacy of and the necessity for monitoring undertaken by the consent holder.

The Council will undertake the review in consultation with the consent holder. The consent holder shall pay the actual and reasonable costs of the review.

86. The consent holder shall pay all costs associated with the implementation of this consent

in order to achieve and demonstrate compliance with the consent conditions therein.

87. Pursuant to section 36 of the Resource Management Act 1991 the consent holder shall pay the actual and reasonable costs incurred by the Council when monitoring the conditions of this consent.

## Lapse Period

88. This consent shall lapse eight years after the date of it being granted, unless the consent is either given effect to before that lapsing date, or unless the Waitomo District Council fixes a longer period pursuant to section 125 of the Resource Management Act 1991.

## Advisory Notes

- 1) The consent holder shall also ensure compliance with conditions of the Waikato Regional Council resource consent. Conditions related to matters covered by that consent have been omitted from this consent to avoid duplication.
- 2) All on-site works shall comply with the requirements of the Health and Safety in Employment Act 1992.
- 3) This consent covers road widening and realignment works associated with Taumatatotara West Road only. The consent holder shall obtain any other resource consents required for road widening, including any resource consents required from Waikato Regional Council.
- 4) The consent holder will need to consult with and meet the requirements of all road controlling authorities affected by the transportation of the turbine components, including Transit New Zealand.
- 5) The consent holder will need to consult with the Manager, Policy and Planning, Waitomo District Council in order to facilitate proceeding with the establishment of a turbine viewing area on Marokopa Road.
- 6) If the transmission lines connecting the substation to the existing electricity transmission lines are located above ground, they shall be designed and located so that they are a permitted activity in accordance with Rule 15.5.1 of the Proposed Waitomo District Plan and the NZ Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).
- 7) For the purposes of condition 11, a height greater than 110 metres will be approved for turbines 1 to 11 inclusive subject to the necessary confirmation being provided with respect of compliance with NZS6808:1998. Condition 3 also requires that the maximum height of turbines 1 to 11 inclusive must not exceed 121.5 metres and that the maximum height of turbines 12 to 22 inclusive must not exceed 110 metres.

https://bbonz-my.sharepoint.com/personal/cdawson\_bbo\_co\_nz/Documents/Taumatatotara wind farm/Hearing/Reporting/Hearing docs/conditions/30 Nov conditions/T4 Conditions post hearing WDC version marked up 30.11.23 (FINAL) 5.00 pm version.docx

# Appendix 1

Taumatatotara Windfarm

Site Plan

Version 1.5.