

CLUTHA DISTRICT COUNCIL: RM1409, LAND USE CONSENT

Date of commencement: As provided in s.116 of the Resource Management Act 1991.

Date of lapsing of consent (if not given effect to): Ten (10) years as provided in s.125 of the Resource Management Act 1991.

Purpose of consent: The various activities for which consent from Clutha District Council has been granted are:

- i) to construct, commission, operate and maintain the Puke Kapo Hau - Mahinerangi Wind Farm;
- ii) to emit noise from the Mahinerangi Wind Farm that will comply with the requirements of NZS 6808:1998 2010 "Acoustics - The Assessment and Measurement of Sound from Wind Turbine Generators", and NZS 6803:1999 "Acoustics - Construction Noise";
- iii) to generate heavy traffic movements during the construction of the Puke Kapo Hau - Mahinerangi Wind Farm; and
- iv) to clear vegetation and undertake earthworks during the construction of the Puke Kapo Hau - Mahinerangi Wind Farm including those associated with the construction of access tracks when they are within 10 metres of natural watercourses.

Legal Description of the Land: The relevant parts of the land described in Schedule A (below), otherwise as more specifically described in this permit consent and in the various plans and other information submitted by the applicant.

Schedule A:

1	<u>TrustPowerManawa Energy Limited</u>	<u>Sections 16-18 SO 21165 and Section 19 SO 21164, formally known as</u> Sections 16-19, Block IV Hedgehope Survey District in <u>OT12C/1173667530</u> .
2	Landcorp <u>Farming Limited</u>	Sections <u>4-1-8</u> , Survey Office Plan 23490 in OT13D/952; <u>and Sections 1-5 and 7-20, Survey Office Plan 23526, Part Section 1 and Sections 3-4, Survey Office Plan 19939, Part Sections 12-16, Block IV and Part Sections 1 and 17, Block V Waipori Survey District in OT13D/954.</u>
<u>3</u>	<u>Thomas Family</u>	<u>Section 24, Block IV Hedgehope Survey District on Survey Office Plan 22457 in OT11D/1371.</u>
<u>43</u>	Beattie Family	Part Run 186B, <u>Survey Office Plan 900</u> in OT14C/1133.
<u>54</u>	Hall Family	Part Section 5, Block X Lee Stream Survey District in OT14C/331, and Section 3, Block X Lee Stream Survey District, <u>Survey Office Plan 21969</u> in OT12C/797.

STANDARD CONDITIONS OF CONSENT:

1. The consent holder shall undertake all activities authorised by this consent, in general accordance with the plans and information submitted with the resource consent application dated 7 December 2006 and numbered RM1409 by the Clutha District Council and any other documentation relevant to the application including Boffa Miskell Plans W07190 Layout Development dated 18 March 2009 ("BMP W07190") as amended by the plans and information submitted in the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 – Fast-track Approvals Act 2024 Application dated [DD MM 2025]. Any request to change or cancel a consent condition must be made in accordance with s.127 of the Resource Management Act 1991.
2. The consent holder shall notify the Planning and Environment Manager, Clutha District Council, at least fifteen (15) working days in advance of the date of the commencement of works associated with this consent.
3. Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by these conditions shall be at the consent holder's expense.
4. Where conditions of this consent require the provision of further information such as reports or management plans by the consent holder, Clutha District Council may commission a peer review of this information to certify its accuracy and compliance with conditions of consent. This peer review shall be at the consent holder's expense.
5. The consent holder shall supply any agent or contractor working under this consent with a copy of the consent conditions on-site so that these conditions can be presented to an officer of the consent authority upon request.
6. Any works carried out during the life of the wind farm, whether maintenance, decommissioning or otherwise, shall be consistent with the conditions attached to this consent.
7. The consent holder shall pay to Clutha District Council all required administration costs and charges fixed by the Council pursuant to s.36 of the Act in relation to any:
 - i) administration, monitoring and inspection relating to this consent; and
 - ii) charges authorised by regulations.
8. In accordance with s.128 of the Resource Management Act 1991 (and in addition to any more specific monitoring conditions attached), Clutha District Council may at two years after the commencement of this consent and at two yearly intervals thereafter, after giving not less than one month's notice in writing, serve notice on the consent holder of its intention to review any of the conditions of this consent for either of the following purposes:
 - (i) To deal with any adverse effect on the environment that may arise from the exercise of this consent, including noise, and which it is appropriate to deal with at a later stage.
 - (ii) To require the consent holder to adopt the best practicable option to avoid, remedy or mitigate any adverse effect on the environment.

9. Upon completion of the construction of the wind farm, the consent holder shall advise the Planning and Environment Manager, Clutha District Council, in writing (and as appropriate supplemented by photographs) that all conditions of this consent have been complied with.
10. The consent holder shall ensure that copies of all Management Plans are also supplied to the Compliance Manager, Otago Regional Council.

SPECIAL CONDITIONS OF CONSENT:

GENERAL

11. ~~The maximum installed generation capacity of the Mahinerangi wind farm shall not exceed 200MW.~~
12. The maximum number of turbines in the Mahinerangi wind farm shall not exceed ~~400~~56.
13. ~~The turbines to be located within the land identified as the Thomas Block, legally described as Section 24, Block IV Hedgehope SO 22457, certificate of title OT 11D/1371, shall only be accessed from Eldorado Track. No tracking is permitted across the wetlands within this block.~~
14. No later than six months after the construction of the turbines and the rehabilitation of tracks within the area known as the "Scrappy Pines Block" [Part of Section 18 Block IV Hedgehope Survey District (CT OT12C/1173)] and shown on Figure 2 (attached), the consent holder shall remove all woody weeds from this block and provide legal protection from stock grazing via a QEII covenant or similar legally binding mechanism. Evidence that this condition has been complied with shall be supplied to the Planning and Environment, Manager Clutha District Council.
- 14A. No later than six months after the establishment of the Wetland Compensation Site, [Section 3 Block X Lee Stream Survey District (CT OT12C/797)] and shown on Figure 2 (attached), the consent holder shall provide legal protection from stock grazing for the period of the operation of the Wind Farm via a covenant or similar legally binding mechanism. Evidence that this condition has been complied with shall be supplied to the Planning and Environment, Manager Clutha District Council.
15. If the wind farm ceases operation for a continuous 18-month period, or is decommissioned for any other reason, then all turbines and other above ground structures shall be removed and turbine footings covered and re-vegetated in accordance with the Rehabilitation Management Plan required under Condition 25 (vi)G) and 25C.
16. Any refuelling, lubrication or mechanical repairs shall be undertaken in such a manner as to ensure that no spillages of hazardous substances occur onto the land surface or into water. If a fuel or oil spillage in excess of 10 litres occurs, the consent holder shall:
 - i) immediately take such action or execute such work as may be necessary to stop and/or contain such escape; and
 - ii) take all reasonable steps to remedy or mitigate any adverse effects on the environment resulting from the escape; and

- iii) inform the Planning and Environment Manager, Clutha District Council, within 24 hours of its occurrence and the steps taken, or being taken, to clean up the spill, remedy any adverse effects, and prevent any recurrence of such escape.

TURBINE CONSTRUCTION

- 17. The maximum turbine height to the tip of the blade shall not exceed ~~145~~165 metres.
- 17A. The minimum ground clearance of the turbine blades shall be 20 meters.
- 17B. No turbine towers or foundations shall be located on any paper road. The centre of the turbine tower must be at least 10m from the boundary of a paper road, but the turbine blades may overhang the paper road boundary.
- 18. The wind turbine structures shall all be finished in the same neutral off-white or light grey, low reflectivity colour system.
- 19. Lattice pylons shall not be used for the wind turbine structures.
- 20. All turbines used within the wind farm site shall be similar in ~~size and~~ appearance.
- 21. The consent holder shall install navigational lighting in order to eliminate the potential for any danger to aircraft (whether direct or indirect) and will obtain an aeronautical report confirming that the final design achieves that requirement.
- 22. All navigational lights required on the turbines or meteorological masts pursuant to Condition 21 shall be shielded to screen downward light spill. The consent holder shall provide a copy of the written advice from the Civil Aviation Authority identifying the turbines upon which the navigational lights are installed to the Planning and Environment Manager, Clutha District Council, within seven days of receiving such advice.

TURBINE OPERATION

- 23. The consent holder shall ensure that the extent of any shadow flicker caused by the wind turbines at any residential dwellings existing at date of consent and subsequent variation dated [DD MM 202X] does not exceed the duration specified in the ~~May 2003 "Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria" [Sustainable Energy Authority Victoria, May 2003, 37p (ISBN 0-9581184-9-3)] Victorian Government Department of Transport and Planning "Planning Guidelines for Development of Wind Energy Facilities, September 2023"~~. The consent holder shall submit a report to the Planning and Environment Manager, Clutha District Council that confirms compliance with this condition for the 12 month period following the completion of construction of the last turbine authorised by this consent.
- 24. Where the wind turbines are shown to affect television reception as assessed by an independent and suitably qualified and experienced radio engineer at dwellings existing at the date of consent and located within 2 km of any turbines, the consent holder shall provide an alternative television reception arrangement (at no cost to the occupier) to those dwellings such that television reception is no worse than that present prior to the construction of the wind farm.

CONSTRUCTION CONDITIONS

Site Development Plan and Associated Expert Certification

25. Not less than one month prior to the commencement of any site works or construction activity, the consent holder shall submit a detailed Site Development Plan(s) to the Planning and Environment Manager, Clutha District Council for confirmation that it is in accordance with the conditions of consent and provides ~~the following information~~ details of the final location of all facilities and infrastructure to be built as follows:

Stage 1 Site Development Plan:

- i) ~~Details of the final location of all facilities and infrastructure to be built.~~ The Site Development Plan for Stage 1 shall be generally in accordance with BMP W07190. Subject to the exceptions noted below, all facilities and infrastructure shall be inside the Stage 1 Windfarm Development Area as depicted on BMP W07190 and shall maintain a ~~buffer zone~~ Windfarm Buffer Area of at least 50m to any area of high ecological value as depicted on BMPW07190/1.

High ecological value areas are generally described and identified in the Ecological Assessment that forms Appendix 3 in Volume II of the resource consent application documents and are depicted on BMPW07190/1.

Areas of high ecological value consist of sites containing any of the following: high and medium quality wetlands, rocky gully sides, high quality vegetation communities, rocky tors of sufficient size and/or configuration to provide lizard refuge, areas containing threatened plants as defined by Hitchmough et al, 2007 [New Zealand Threat Classification System Lists - 2005, Rod Hitchmough, Leigh Bull and Pam Cromarty (comp), January 2007, Department of Conservation, 194p (ISBN 0-478-14128-9)], or any successive publication, and waterbodies in the first order streams with resident Eldons galaxias.

The exceptions are:

- turbine locations 63, ~~64~~, 65, ~~66~~, 68, ~~and 69~~, ~~and 70~~ being development within the covenanted area, ~~and turbine locations 97, 98, 99 and 100 being development within high quality tussock referred to as the Thomas Block~~ and as marked on BMP W07190/1;
- access tracks in two areas as marked "D" on BMP W07190/1 and which are within or near areas of high ecological value;
- access tracks and associated earthworks within ~~ecological~~ Windfarm bBuffer aAreas as generally marked on BMP W07190/1; and
- any sediment controls and associated earthworks that need to be located within ~~ecological Windfarm bBuffer aAreas~~ to avoid adverse effects upon adjacent areas of high ecological value.

Stage 2 Site Development Plan:

The Stage 2 Site Development Plan shall be generally in accordance

with Map 1 – Puke Kapo Hau Stage 2 Layout Plan, which identifies the Stage 2 Wind Farm Development Area. All turbine towers, turbine foundations, facilities, infrastructure and cabling shall be located within the Stage 2 Wind Farm Development Area.

Matters relevant to both Stage 1 and Stage 2 Site Development Plans

The Site Development pPlans shall include, but not be limited to:

- a) all finalised turbine locations, which shall only be located within the ~~circles~~ contingency zones depicted on BMPW07190/1 ~~(for Stage 1 only)~~ and Map 1 – Puke Kapo Hau Stage 2 Layout Plan;
- b) all access tracks which shall be located generally as shown on ~~BMPW07190/1~~ Map 1 – Puke Kapo Hau Stage 2 Layout Plan, with:
 - i) a maximum overall length of ~~371~~ km; and
 - ii) a post construction width ~~for construction of 12m~~ narrowing to 5m post-construction of 5.5m widening to 9.5m on bends.
- c) cut and fill batters associated with tracking, which shall have a maximum height of 10m and slopes which are generally consistent with the typical cross section depicted in Appendix A.2;
- d) all permanent hard stand areas, which shall be located within the ~~circles~~ turbine contingency zones depicted on ~~BMPW07190/1~~ Map 1 – Puke Kapo Hau Stage 2 Layout Plan so as to minimise the total volume and area of earthworks, shall have a maximum permanent hard stand area of ~~1400m²~~ 1855m² and a maximum depth of fill of 12m. In particular the hard stand areas for turbines located at Stage 1 sites T80, ~~T84~~ and T86 shall be located to minimise the visual effects from Lake Mahinerangi;
- e) all fill sites for excess spoil, which shall have a maximum volume of fill to be disposed of ~~460390~~,000 m³, a maximum coverage of ~~61.545~~ ha, and a maximum fill depth of 3m and maintain a minimum set back of 10m from waterbodies;
- f) sediment ponds, which shall have a maximum bund height of 3m.
- g) the substation ~~site, which~~ and battery energy storage system (“BESS”) shall be located generally as shown on ~~BMP-W07190/1~~ Map 1 – Puke Kapo Hau Stage 2 Layout Plan;
- h) the operations and maintenance ~~building~~facility and associated waste and water services, and construction site office and depot, which shall be located generally as shown on ~~BMP-W07190/1~~ Map 1 – Puke Kapo Hau Stage 2 Layout Plan;
- i) the transmission line(s);
- j) the concrete batching area(s), which shall be located generally as shown on ~~BMPW07190/1~~ and Map 1 – Puke Kapo Hau Stage 2 Layout Plan;
- k) the internal transmission system;
- l) meteorological masts and equipment; and
- m) any other areas of land disturbance.

Advice note:

The substation, BESS, operations and maintenance facility are subject to a separate land use consent RMXXXX and are shown on the Map 1 – Puke Kapo Hau Stage 2 Layout Plan for locational purposes only.

- ii) Not less than one month prior to any ~~stage of the~~ construction commencing in Stage 1, the consent holder shall submit to the Planning and Environment Manager, Clutha District Council a report from an independent and suitably qualified and experienced ecologist confirming that the sites (subject to the exceptions in condition 25(i) above) affected by the development of the infrastructure identified in 25(i) above do not contain areas of high ecological value.
- iii) Not less than one month prior to any ~~stage of the~~ construction commencing in Stage 1, the consent holder shall submit to the Planning and Environment Manager, Clutha District Council a report from an independent and suitably qualified and experienced ecologist confirming that high ecological value areas and associated buffer zones adjacent to tracks and defined construction zones have been identified and have been clearly marked as such prior to construction commencing and/or methodologies provided for in the relevant Supplementary Environmental Management Plans are sufficient to avoid any adverse effects upon such adjacent high ecological values areas.

Advice Note:

For the purpose of applying this condition to Stage 1, the following definitions are provided:

High quality vegetation communities (including high and medium quality wetlands) are areas that are no less than 50 m in longitudinal length with regards to gullies, and no less than 400 m² (i.e., 20 m by 20 m) for grasslands. Such areas will possess greater than 60% indigenous vegetation covering one of more of the wetland, tussock/and, shrub/and or flax/and attributes.

Rocky tors of sufficient size and/or configuration to provide lizard refuge are any rock slab and/or any pile or multilayer of rocks greater than 3 m in diameter, with crevices and refuges.

Environmental Construction Management Plan

- 25A. ~~Prior to undertaking any activities authorised by this resource consent, t~~The consent holder shall provide to the Planning and Environment Manager, Clutha District Council, a finalised comprehensive Environmental Construction Management Plan (ECMP) prepared by an independent and suitably qualified and experienced person for written certification one month prior to construction work commencing.

For Stage 1, t~~he~~ ECMP shall generally be in accordance with Appendix 12 of the application documentation entitled *Mahinerangi Wind Farm Draft Environmental Construction Management Plan*, prepared by Kingett Mitchell

Ltd.

For Stage 2, the ECMP shall generally be in accordance with Part C of the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 – Fast-track Approvals Act Application dated DD MM 2025 entitled “Draft Environmental Construction Management Plan Mahinerangi Wind Farm Stage 2”, prepared by Riley Consultants Ltd.

The applicable ECMP shall set out the practices and procedures to be adopted to ensure that all resource consent conditions relating to the construction of the Mahinerangi Wind Farm are complied with. This shall include management procedures for the establishment, operation, and rehabilitation phases of the wind farm.

- i) Subject to any other conditions of this consent, all activities shall be undertaken in accordance with the latest version of the applicable ECMP and related plans (as listed in condition 25A(vi)G) (below).
- ii) The applicable ECMP and associated plans shall be reviewed by the consent holder and may be amended accordingly to take into account:
 - (a) Any recommendations of independent experts engaged to undertake works in respect of the Mahinerangi Wind Farm.
 - (b) Any required actions identified as a result of monitoring under these consents.
 - (c) Any required actions to ensure that appropriate monitoring and reporting of all activities is undertaken in accordance with the resource consent conditions.
- iii) The applicable ECMP and related plans shall not be amended in a way that contravenes the objectives set out for the respective plans, in accordance with conditions set out in 25A, 25B, 25C, 25D, 25E, 25F, 25G.
- iv) A copy of the latest version of the applicable ECMP and associated plans shall be kept on site at all times and all key personnel shall be made aware of each Plans' contents.
- v) If amendments are made to the applicable ECMP (or associated plans) in accordance with condition 25A(ii) above, updated plans must be provided to the Planning and Environment Manager, Clutha District Council.

Purpose and Content of ECMP

- vi) The purpose of the ECMP is to detail the practices and procedures to be adopted to ensure that all resource consent conditions relating to construction, rehabilitation and operation of the Mahinerangi Wind Farm are complied with and that adverse potential effects on the environment associated with construction are appropriately avoided, remedied or mitigated. The ECMP shall provide for the following objectives:
 - (a) To minimise the overall area of disturbance, so as to reduce the potential impact on fauna, flora and waterwaybodies.
 - (b) To minimise the sediment generation and sediment laden

runoff.

- (c) To ensure that appropriate monitoring and reporting of all activities is undertaken in accordance with the resource consent conditions.
 - (d) To ensure that the earthworks associated with the construction of the access tracks be contoured so that, to the greatest extent practicable, they will blend the tracking with the surrounding landscape;
 - (e) To ensure that the earthworks are undertaken in a manner that provides for final surfaces which are suitable for rehabilitation.
 - (f) To ensure that the areas of fill disposal are contoured so that, to the greatest extent practicable, they blend with the surrounding landform;
 - (g) To ensure that the design and appearance of the ~~subswitch~~ station for Stage 1, and ~~operations building (including colour schemes) will blend the substation for Stage 2 are appropriately located with~~ in the environment.
 - (h) To ensure that the earthworks associated with the construction of the turbine, hard stand areas and any other landing and lay-by sites will be contoured to blend with the surrounding landform.
 - (i) To ensure that any low quality gully sites located in Stage 1 be appropriately used for spoil disposal (consistent with condition 25E(vii)(b)(iv) below).
 - (j) To provide a framework for the individual management plans including, but not limited to:
 - ~~a Rehabilitation Management Plan;~~
 - ~~an Environmental Monitoring Plan and Report;~~
 - an Ecological Monitoring and Management Plan;
 - an Earthworks Management Plan;
 - A Construction Traffic Management Plan;
 - Supplementary Environmental Management Plans (SEMPs) associated with ~~the Stage 1~~ construction of tracking and sediment control devices and any associated earthworks located within the ~~ecological Windfarm Buffer Areas;~~
 - ~~and~~
 - a Fire Management Plan; and
 - an archaeological Management Plan.
- vii) The ECMP shall contain an explanation of how it will be implemented and associated implementation responsibilities. This shall include a description of the documentation and information management and approvals processes to be used in implementing the plan, and a description of the process for monitoring performance and changes to the plan based on monitoring activity.
- viii) The consent holder shall ensure that the establishment, operational

and rehabilitation phases of the Mahinerangi Wind Farm are undertaken in accordance with the requirements of the ECMP.

- ix) A joint report from an independent and qualified landscape architect and an independent and qualified engineer shall be provided to the Planning and Environment Manager, Clutha District Council, three months post-construction confirming that the ECMP requirements have been complied with (and relevant objectives met) in respect of the following:
- (a) the earthworks associated with the construction of the access tracks have been contoured to ensure that, to the greatest extent practicable, they have blended the tracking with the surrounding landscape;
 - (b) the areas of fill disposal have been contoured to ensure that, to the greatest extent practicable, they have blended with the surrounding landform;
 - (c) the design ~~and appearance~~ and location of the ~~subswitch station for Stage 1, and substation for Stage 2; and operations building (including colour schemes) have blended with the environment;~~ and
 - (d) the earthworks associated with the construction of the turbine, hard stand areas and any other landing and lay-by sites have been contoured to blend with the surrounding landform.

25B Environmental Monitoring Plan and Report

- (i) An Environmental Monitoring Plan and Report shall be prepared by the consent holder that sets out a schedule of monitoring to be undertaken and requirements for reporting of these results in accordance with the conditions of resource consent.
- (ii) The consent holder shall prepare and submit to the Planning and Environment Manager, Clutha District Council, an annual Environmental Monitoring Report, prior to each anniversary of the commencement of the resource consents. The monitoring period to be included in each report shall be for the preceding 12 month period.
- (iii) As a minimum, the Environmental Monitoring Report shall:
 - (a) Summarise all environmental monitoring undertaken;
 - (b) Summarise all the data collected, as required under the Environmental Monitoring Plan outlined above and any other conditions of resource consent. This may include graphical presentation, statistical summations of monitoring data, critical analysis of the information in terms of compliance and environmental effects;
 - (c) Highlight and discuss any important environmental trends;
 - (d) Report and discuss any difficulties in compliance with the conditions of the consent and the measures adopted to rectify problems; and
 - (e) List any maintenance works needed, proposed or

undertaken to ensure compliance with the conditions of the consent or to facilitate operations.

25C Rehabilitation Management Plan

- i) The Rehabilitation Management Plan shall be prepared by an independent and suitably qualified and experienced person and provided to the Planning and Environment Manager, Clutha District Council one month prior to the commencement of construction activities.

The Rehabilitation Management Plan shall define the scope and methodology for rehabilitation of the areas affected by the construction activities and the on-going maintenance of the rehabilitation work and shall be implemented under the supervision of a suitably qualified, experienced and independent person.

- ii) The consent holder shall undertake rehabilitation and revegetation of areas affected by construction activities to achieve an outcome generally in accordance with the following objectives:

- (a) In the short-term to create stable landforms by establishing vegetation cover (which may include pasture) and erosion-resistant surfaces that have characteristics that favour growth of sustainable plant communities and manage run off and sediment generation;
- (b) To prevent weeds and pests invading the site in a manner that is consistent with the weeds and pests control programme required pursuant to condition 31; and

(c) Provide methods for rehabilitation of snow tussock in the Wetland and Aquatic Compensation Sites.

- iii) The Rehabilitation Management Plan shall provide details and methodologies for achieving the rehabilitation objectives set out in 25C(ii) above, and those to be adopted during construction and operation of the wind farm and the post-construction phase, in order that compliance with all other conditions of ~~the~~ resource consent can be achieved.

- iv) The Rehabilitation Management Plan shall, as a minimum, address the following:

- (a) The rehabilitation objectives set out in condition 25C(ii) above.
- (b) The personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times.
- (c) The means by which weeds will be controlled and targets for weeds met during the wind farm construction and operation stages in accordance with the control programme required pursuant to condition 29.
- (d) The methodology for rehabilitation shall include but not be limited to:
 - i. ~~Thomas Block and~~ Scrappy Pines Block, Wetland and Aquatic Compensation Sites and other areas listed as Stage 1 exceptions in 25(i): removal of tussock for direct transfer, storage and maintenance of tussock, replacement of tussock vegetation in the Wetland and Aquatic Compensation Sites and

- ~~turbine sites~~, planting of additional tussock and other species as necessary such that a communities is reestablished and is similar to that which existed prior to construction commencing as determined in accordance with (e) below.
- ii. Pasture grassland ~~and turbine sites~~: recontouring, regrassing, erosion controls, control of woody weeds.
 - iii. Softening of batters by hydroseeding (on steep batters) or by direct transfer and/or planting (on gentle slopes) to match the vegetation of the adjacent terrain.
- (e) The survey methodology to be employed prior to works commencing to characterise the vegetation communities present in the 'Scrappy Pines Block', ~~Thomas Block~~, Wetland and Aquatic Compensation Sites and other areas listed as Stage 1 exceptions in 25(i), such that the percentage cover, and the species present are confirmed.
- v) The Rehabilitation Management Plan shall contain completion criteria, that, when met, will show that rehabilitation has succeeded. ~~That~~These criteria, shall include, as a minimum, measures which confirm:
- (a) Establishment of snow tussock communities on the 'Scrappy Pines Block', ~~Thomas Block~~ Wetland and Aquatic Compensation Sites and areas that are specified as Stage 1 exceptions in condition 25(i), which are of similar species composition and percentage cover of the vegetation that was present, prior to the works commencing (as identified in (iv)(e) above;
 - (b) Establishment of pasture grassland in all other areas.
 - (c) Management of runoff and sediment generation;
 - (d) The outcomes for weed and pest control programmes.
- vi) The Stage 1 Mahinerangi Wind Farm Rehabilitation Plan (dated July 2010) shall be updated within three months to replace the individual turbine locations (turbines 1, 5, 6, 7 & 9) stipulated for tussock rehabilitation under Table 1 of the MWF Stage 1 Pre-construction Vegetation Survey (dated September 2010) with the proposed, rehabilitation methodology and targets and the rehabilitation sites(s) identified in Figure 1, (section 1.2, Page 3) of the s.127 '*Mahinerangi Wind Farm – Request for changes of Vegetation Rehabilitation*' application document received by Council on 16 August 2017, as approved and attached to this consent.

25D Ecological Monitoring and Management Plan

- i) ~~For Stage 1 -Aa~~ Ecological Monitoring and Management Plan shall be prepared by an independent and suitably qualified and experienced person in accordance with Appendix 2 of the Mahinerangi Wind Farm Ecological Assessment prepared by Kingett Mitchell Ltd. The Ecological Monitoring and Management Plan shall form part of the ECMP required under Condition 25A. That Plan shall set out the practices and procedures to be adopted to ensure that all resource

consent conditions relating to ecological monitoring and management are complied with. The Ecological Monitoring and Management Plan shall make provision for the following (as a minimum):

- a) Monitoring, and associated reporting (as required by Conditions 26 - 30) in relation to:
 - ~~bird-strike~~;
 - New Zealand Falcon (*Falco novaseelandiae*);
 - mammal pests and predators;
 - *Carex tenuiculmis* and *Epilobium chionanthum*; and
 - invasive weeds.
 - b) A requirement that all contractors shall be required to ensure that all vehicles shall, as far as is practicable, be confined to formed access routes and the active construction zone (see Condition 25E(vi)).
 - c) A requirement that construction vehicles must be cleaned of adhering soil before entering the site.
 - d) A requirement that the consent holder use its reasonable endeavours to source weed free aggregate for all construction, operational and maintenance related requirements.
- ii) For Stage 2, the Consent Holder shall ensure that ecological monitoring and management of the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 is undertaken in accordance with the requirements of the following Management Plans:
- a) Rehabilitation Management Plan;
 - b) *Carex tenuiculmis* and *Epilobium chionanthum* Management Plan;
 - c) Avifauna Management Plan;
 - d) Woody Weed Management Plan; and
 - e) Mammalian Pest Control Plan.

25E Earthworks Management Plan

- i) An Earthworks Management Plan shall be prepared and shall be submitted by the consent holder to the Planning and Environment Manager, Clutha District Council, for certification one month prior to the commencement of construction activities. The Earthworks Management Plan shall set out the practices and management procedures to be adopted to ensure that all resource consent conditions relating to earthworks are complied with. The Earthworks Management Plan shall form part of the ECMP required under Condition 25A.
- ii) For Stage 1, ~~Matters~~ to be provided for by the management procedures include, but are not limited to, relevant matters contained within Part C - Earthworks Management Plan of the draft ECMP which formed Appendix 12 of Volume II of the resource consent application documentation.

For Stage 2, the finalised Earthworks Management Plan shall generally be in accordance with Part C of the Puke Kapo Hau -

Mahinerangi Wind Farm Stage 2 – Fast-Track Approvals Act
Application dated DD MM 2025 entitled “Draft Earthworks
Management Plan Mahinerangi Wind Farm Stage 2”, prepared by
Riley Consultants Ltd.

iii) The Stage 1 Earthworks Management Plan shall provide for the following objectives:

- a) to ensure that earthworks do not adversely affect areas of high ecological value (acknowledging the provision of relevant ~~ecological bBuffer a~~ Areas (as marked on BMP W07190/1) and SEMP) and water bodies within the Mahinerangi Wind Farm site;
- b) to ensure that adverse visual effects are minimised;
- c) to minimise sediment generation and sediment laden runoff;
- d) To ensure the control and/or mitigation of adverse effects of any dust, sediment run- off or contamination of stormwater.
- e) To avoid adverse effects from sediment run-off from fill areas and provide for sediment control works that will be capable of safely passing a ~~50-year, 24-hour~~ 5% AEP rainfall storm.

The Stage 2 Earthworks Management Plan shall provide for the following objectives:

- a) To minimise the overall area of disturbance, to reduce the potential impact on wetlands and streams;
- b) To minimise the generation of sediment and sediment laden runoff;
- c) To ensure that the earthworks are undertaken in a manner that provides for final surfaces which are suitable for rehabilitation where rehabilitation is proposed;
- d) To ensure the control and/or mitigation of any potential adverse effects of dust emissions, sediment run-off or contamination of stormwater; and
- e) To ensure that earthworks are undertaken in a manner that provides for compliance with relevant consent conditions in respect of water quality criteria applicable to discharge permits, and avoid, remedy or mitigate potential adverse effects on the environment.

- iv) The Earthworks Management Plan shall generally comply with the requirements of Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (Guidance Document 2016/05). ~~Auckland Regional Council's "Erosion and Sediment Control Guidelines for Land Disturbing Activities" (Technical Publication No.90);~~
- v) The consent holder shall ensure that all earthworks associated with the construction of the Mahinerangi Wind Farm are undertaken in accordance with the requirements of the Earthworks Management Plan.
- vi) The consent holder shall define the active construction zone which

is comprised of the various sites detailed in Condition 25 (i) by clearly marking (i.e. fence, tape or other appropriate mechanism) the limits of the construction zone.

- vii) The Earthworks Management Plan shall, as a minimum address the following:
- a) The objectives set out in 25E(iii) above, and methods appropriate to the Mahinerangi Wind Farm site;
 - b) The overall design of the rehabilitated landscape, taking into account the need to:
 - (i) ensure that where appropriate, sediment control areas are installed prior to soil disposal work;
 - (ii) minimise erosion from fill areas by providing for appropriate and stable:
 - sediment compaction levels; and
 - revegetation.
 - (iii) ensure that sediment control devices for fill areas are designed to cater for a ~~50-year, 24-hour~~ 5% AEP rainfall storm event ;
 - (iv) The Earthworks Management Plan shall include details ~~in circumstances where low quality gully sites are used~~ for spoil disposal, ~~of and~~ how the following criteria are to be met:
 - a) That fill disposal must not result in siltation of downstream streams.
 - b) That fill disposal must not result in changes to downstream stream water nutrient concentrations or to other chemical stream water parameters.
 - c) How ~~the composition and structure of~~ potentially affected adjacent wetlands ~~s will be avoided or minimised~~ by the consent holder. ~~vegetation within the affected catchment is to be monitored prior to and for 5 years after spoil deposition, using quantitative sampling methodology undertaken by an independent and suitably qualified ecologist reporting to the Planning and Environment Manager, Clutha District Council.~~
 - d) How any adverse vegetation changes revealed by monitoring are to be remedied or mitigated by the consent holder.

25F Supplementary Environmental Management Plans (used for Stage 1 works only)

- i) The consent holder shall submit to the Planning and Environment Manager, Clutha District Council, at least 10 working days prior to commencement of construction activities associated with the establishment of access tracks and/or sediment control works in the areas within the ~~ecological Windfarm Buffer Areas~~ or areas marked "D" on BMPW07190/1 specific Supplementary Environmental Management Plans (SEMPs). The SEMP's will form part of the ECMP. The SEMP's shall set out the practices and procedures to ensure that access tracks and associated earthworks and sediment control works within the ~~ecological Windfarm Buffer Areas~~ or areas marked "D" on BMPW07190/1, are constructed so as to avoid, remedy or mitigate

adverse effects upon adjacent areas of high ecological value.

- ii) The SEMP's shall, as a minimum, address the following construction related activities:
 - a) the erection of structures across and/or within the bed of watercourses;
 - b) the establishment of diversion channels when erecting structures across and/or within the bed of watercourses;
 - c) the establishment of fill disposal areas;
 - d) the disturbance of the bed of any watercourses resulting from any construction activity within the bed of watercourses;
 - e) the diversion of water associated with any construction activity within the bed of watercourses;
 - f) construction related discharges; and
 - g) any other activity which is within the ~~ecological~~ Windfarm ~~Buffer~~ Areas identified on Plan BMPW07190/1.
- iii) As a minimum, the SEMP for each specific construction activity identified in Condition 25F(ii) shall include the following information:
 - a) a map showing the specific location of each structure and/or component related to the construction activity and the high ecological value area for which protection is required, including sphagnum bogs and streams;
 - b) identification of whether the structure and/or component related to the construction activity is temporary or permanent and confirmation of the risk of potential adverse effects on high ecological value areas;
 - c) the timing and duration of the activity (i.e. structure erection or discharge etc);
 - d) cross-section and plan drawings to scale showing the dimensions and nature of each structure and/or component related to the construction activity;
 - e) construction methods that will be utilised, including identification of erosion and sediment control measures that will be put in place;
 - f) for activities within watercourses, confirmation of flow carrying capacity of the watercourse prior to following installation of each structure and/or component related to the construction activity, confirmation of the flow capacity of the new structure and/or component and identification of secondary flow paths;
 - g) for discharges, the maximum rate of discharge, which will comply with relevant resource consent conditions; and
 - h) the mechanisms, procedures, and practices to be followed to ensure that all works within the ~~ecological~~ Windfarm ~~Buffer~~ Areas are undertaken to avoid adverse effects upon the adjacent areas of high ecological value.

25G Fire Management Plan

- i) The consent holder shall prepare a Fire Management Plan-in accordance with the following conditions:

- a) The purpose of the Fire Management Plan shall be to establish management procedures to ensure that the fire risk associated with the Mahinerangi Wind Farm is minimised and, should fires occur, that immediate and appropriate action is instigated. The Fire Management Plan shall be part of the ECMP.
- b) The Fire Management Plan shall be structured in general accordance with the Forest and Rural Fire Act 1977.
- c) A copy of the Fire Management Plan is to be submitted to the Planning and Environment Manager, Clutha District Council, one month prior to commencement of construction of the Mahinerangi Wind Farm.
- d) The consent holder shall at all times comply with the requirements of the Fire Management Plan.

Advice Note:

The Department of Conservation, Clutha District Council and Dunedin City Council, as parties responsible for the management of rural fires, are to be consulted during the development of the Fire Management Plan.

ECOLOGICAL MONITORING AND MANAGEMENT

AVIFAUNA

- 26 The Consent Holder shall ensure that the construction of the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 is undertaken in accordance with the requirements of the Avifauna Management Plan prepared by Boffa Miskell Limited that forms Part C of the Puke Kapo Hau Mahinerangi Wind Farm Stage 2 – Fast-Track Approvals Act Application dated DD MM 2025 and in accordance with condition 27.
- i) The objective of the Puke Kapo Hau - Avifauna Management Plan (AviMP) is to describe the methodological approach to minimise actual or potential adverse effects on falcon and pied oystercatcher resulting from of the construction and operation of the Stage 2 of Mahinerangi Wind Farm.
 - ii) In order to achieve the objective established in Condition 26 i, as a minimum the AviMP must contain the following details:
 - a) Pre-construction and construction monitoring measures for falcon and pied oystercatcher including surveys and timing, necessary construction buffers and reporting requirements; and
 - b) Operational monitoring of falcon, including surveys, GPS tracking and reporting requirements.

Advice Note:

With respect to mitigation/predator control to support falcon and pied oystercatcher, the Mammalian Pest Control Plan identifies the areas/habitat

to be targeted, target pest species, types of control tools and timings for control methods. Refer to conditions 28 and 28A.

Bird Strike

~~26. The consent holder shall monitor the instances of bird strike at the wind farm as follows:~~

- ~~i) The consent holder shall retrieve any bird carcasses located at the site. For the first two years of operation, retrieval of any carcasses will be on a weekly basis during the breeding season (spring and early summer) and on a monthly basis during the remainder of the year. Thereafter, carcass retrieval will be associated with the routine maintenance at each turbine with increased surveillance for bird carcasses during the breeding season (spring and early summer) if considered necessary as a result of the first two years of monitoring.~~
 - ~~a) During the first two years of the operation of the Mahinerangi Wind Farm, all retrieved bird carcasses will be assessed by identifying the species, gender, age class (i.e. juvenile or adult) and where possible, the cause of death, location of carcass in relation to turbines, whether there are any particular factors associated with the Mahinerangi wind farm, and/or any particular turbine influencing the bird deaths, and antecedent weather conditions. This assessment is to be undertaken by an independent and qualified avifauna expert.~~
 - ~~b) Following the first two years of operation, the consent holder shall, annually, submit a report to the Planning and Environment Manager, Clutha District Council, detailing all bird fatalities, known or likely cause of death, species and seasonal or spatial patterns, particularly in relation to the operation of any individual turbine or the prevalence of avifauna species listed as nationally endangered (Hitchmough et al, 2007), nationally critical, or in serious or gradual decline. A copy of this report shall also be supplied to the Department of Conservation.~~
 - ~~c) If the monitoring undertaken in accordance with Conditions (i)(a) and (i)(b) above, identifies a significant adverse effect as a result of the operation of the Mahinerangi Wind Farm, then the consent holder shall develop a mitigation programme and continue monitoring for a further period, as determined appropriate following consultation with both the consent authority and the Department of Conservation.~~
 - ~~d) A significant adverse effect is defined as being a strike rate of more than 0.5 individuals per turbine per year on all species as a result of the operation of the Mahinerangi Wind Farm.~~
- ~~ii) The bird strike carcasses shall be disposed of off-site and at an appropriate facility.~~
- ~~iii) The consent holder shall undertake, in order to minimise the visibility of any carcasses in the vicinity of the turbines that may attract raptor species, reasonable endeavours to ensure enhanced vegetation~~

~~growth and density in the vicinity of the wind turbines;~~

- ~~iv) In the event that there are significant adverse effects (as defined in (i)(d) above) the consent authority may review this resource consent pursuant to section 128 of the Resource Management Act 1991 to consider:~~
- ~~a) the species of birds involved and in particular, the level of protection afforded to that species under the Wildlife Act 1953;~~
 - ~~b) the overall performance of the wind farm in respect of bird strike rate;~~
 - ~~c) the performance of individual turbines within the wind farm;~~
 - ~~d) whether there are any particular factors influencing the bird death rate at individual turbines; and~~
 - ~~e) whether additional mitigation is required as a result of the significant adverse effect.~~

Falcon Monitoring

27. The consent holder shall undertake monitoring of the New Zealand Falcon for Stage 1 and 2 as follows:

- i) The consent holder shall initiate a programme to monitor New Zealand Falcon, in the vicinity of the Mahinerangi Wind Farm. The monitoring programme shall commence at least two summers prior to the first turbines associated with Stage 1 of the wind farm becoming operational, and, for Stage 2 the summer prior to construction commencing, and continue for two years after it each stage becomes operational. Any subsequent monitoring will be determined after the results of the first two years of operational monitoring are evaluated in accordance with Condition 27(iv).

Advice Note:

Some monitoring in accordance with this condition has been undertaken prior to the implementation of this resource consent.

- ii) The monitoring programme for each stage shall include, but not be limited to, the following:
 - a) Identification of any New Zealand Falcon nesting sites inside and within 53 km outside the boundaries of the Mahinerangi Wind Farm.
 - b) Monitoring, during the breeding season (i.e., spring and early summer), any visits by New Zealand Falcon to the Mahinerangi Wind Farm site and the occupancy of the identified nesting sites. As a minimum, monitoring shall be undertaken during three consecutive days of fine conditions, at least three times throughout the breeding season.
 - c) A record of New Zealand Falcon bird strike as monitored in accordance with Condition 27, attached to this resource consent.
 - d) A record of all incidental observations of New Zealand Falcon within the Mahinerangi Wind Farm site.

- iii) ~~For Stage 1, the~~ consent holder shall consult with Department of Conservation in developing the monitoring programme. Once the scope of the monitoring programme has been developed, an outline of the activities that constitute the monitoring programme shall be submitted to the Planning and Environment Manager, Clutha District Council.
- iv) If the monitoring undertaken in accordance with conditions (i) to (iii) ~~for Stage 1 or (i) and (ii) for Stage 2~~ above, identifies breeding failure of New Zealand Falcon as a result of the operation of the Mahinerangi Wind Farm, then the consent holder shall develop a mitigation programme and continue monitoring as determined appropriate after consultation with the consent authority and Department of Conservation. ~~The mitigation programme shall include, but not necessarily be limited to, relevant matters identified in the Ecological Assessment that formed Appendix 3 of Volume II of the resource consent application documentation.~~

Advice Note:

~~For Stage 1, the~~ mitigation programme shall include, but not necessarily be limited to, relevant matters identified in the Ecological Assessment, which formed Appendix 3 of Volume II in the resource consent application documentation.

~~For Stage 2, the falcon mitigation programme shall include, but not necessarily be limited to, relevant matters identified in the Avifauna Management Plan, that forms Part C of the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 – Fast-Track Approvals Act Application dated DD MM 2025.~~

LIZARDS

- 27A. The Consent Holder shall ensure that the construction of the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 is undertaken in accordance with the requirements of the Lizard Management Plan Blueprint Ecology that forms Part C of the Mahinerangi Wind Farm Stage 2 – Fast-Track Approvals Act Application dated DD MM 2025.
- iii) The objective of the Lizard Management Plan (LMP) is to avoid, minimise, remedy, or compensate for any adverse effects of construction works on native lizard species within the Puke Kapo Hau - Stage 2 Wind Farm Development Area.
 - iv) In order to achieve the objective established in Condition 27A, as a minimum the LMP must contain the following:
 - a) Planning and timing of lizard capture/salvage, handling, relocation and roles and responsibilities;
 - b) Preparing habitat at release sites, capturing lizards at impact sites, temporary captivity (if required), data collection, transport to and release at receiving sites;
 - c) Predator control; and
 - d) Post-release monitoring, contingency implementation as

appropriate, and reporting to the Department of Conservation.

MAMMAL PEST CONTROL

28. The consent holder shall develop and implement a mammal pest control programme. The mitigation and monitoring programme shall include, but not necessarily be limited to, relevant matters identified in the Mammalian Pest Control Plan prepared by Boffa Miskell Limited that forms Part C of the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 – Fast-Track Approvals Act Application dated DD MM 2025.
- 28A The purpose of the programme will be to ensure that the densities of predators, such as feral cats, stoats, weasels, ferrets, hedgehogs and prey species such as rabbits and hares are at low densities in the area. To achieve this, the consent holder shall comply with the following:
- i) Undertake predator control measures to a level no greater than 10% residual trap interference.
 - ii) Control measures may include, but will not be limited to, trapping and baiting.
 - iii) The consent holder shall ensure that all predator carcasses are disposed off-site and at an appropriate facility.

CONTROL OF INVASIVE WOODY WEEDS

29. The consent holder shall ensure the construction and rehabilitation of Puke Kapo Hau Mahinerangi Wind Farm Stage 2 is undertaken in accordance with the requirements of the Woody Weed Management Plan prepared by SLR Consulting New Zealand that forms Part C of the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 – Fast-Track Approvals Act Application dated DD MM 2025. ~~develop and implement a~~ This includes a mitigation and monitoring ~~and management~~ programme for the control of invasive woody weeds that shall apply during the construction and rehabilitation of the Mahinerangi Wind Farm and for four years after construction and rehabilitation has been completed, or for such a period until these species cease colonising the areas disturbed by the construction activity.
- 29A The purpose of the programme will be to ensure that invasive woody weeds (i.e., wilding pines, gorse, Spanish heath and broom) within the Mahinerangi Wind Farm site (in excess of the status quo) are targeted for control. To achieve this, the consent holder shall identify and document the extent of invasive woody weeds within the site at the commencement of the project and target the invasive weeds (in excess of the status quo) for control using manual and/or herbicide treatment. Thereafter, each spring, during the term specified within this condition, the consent holder shall survey the extent of invasive weed species, with a particular focus on areas most susceptible to invasive weeds (i.e., disturbed areas), and undertake control measures as appropriate.

MANAGEMENT OF CAREX TENUICULMIS AND EPILOBIUM CHIONANTHUM

30. ~~Should construction activities directly (for example by way of earthworks) or indirectly (for example by way of changes in surface drainage patterns) adversely affect the population of Carex tenuiculmis then the following measures shall be carried out:~~

- i) ~~An independent and qualified ecologist shall assess the size and quality of the affected population of *Carex tenuiculmis* as a proportion of the broader population within the Mahinerangi Wind Farm site and immediately surrounding environment. That independent ecologist shall determine whether the risk to the broader population is such that remedial steps should be taken. Should remedial steps be required then a plan shall be prepared and submitted to the Planning and Environment Manager, Clutha District Council and may include but not be limited to the following activities:~~

The Consent Holder shall ensure that the construction of the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 is undertaken in accordance with the requirements of the *Carex tenuiculmis* and *Epilobium chionanthum* Management Plan (C&EMP) prepared by SLR Consulting New Zealand that forms Part C of the Puke Kapo Hau - Mahinerangi Wind Farm Stage 2 – Fast-Track Approvals Act Application dated DD MM 2025 and in accordance with the following conditions:

- i) Prior to construction, the Consent holder shall undertake a survey to determine whether *Carex tenuiculmis* and *Epilobium chionanthum* are present within specific wetland locations identified in the C&EMP that could potentially be affected by construction activities;
- ii) If the survey undertaken in accordance with Condition 30 i) above determines that *Carex tenuiculmis* and *Epilobium chionanthum* are present within affected wetlands, then the Consent Holder shall develop a pre and post construction works monitoring programme that includes;
 - Assessing the habitat within which the species is present;
 - ~~Assessing potential translocation habitat within the 'Scrappy Pines Block~~Protecting existing habitat of At Risk species located in the Wetland Compensation Site';
 - Collecting seed and propagating seedlings;
 - Translocating the ~~at-risk~~ individuals to selected locations either within the 'Scrappy Pines Block' or ~~at a location where they will not be adversely affected by direct earthworks or surface drainage patterns, or grazing within the Mahinerangi Wind Farm site~~ the 'Wetland Compensation Site';
 - Planting additional seed raised individuals at locations either within the 'Scrappy Pines Block' or ~~at a location where they will not be adversely affected by direct earthworks or surface drainage patterns, or grazing within the Mahinerangi Wind Farm site~~ the 'Wetland Compensation Site'; and
 - ~~Monitoring the new population for a period of 12 months to ensure that the plants have been successfully established~~ Bi-annual monitoring of new populations to ensure that the plants have successfully established.

- 30A All management actions shall be recorded and reports submitted to the Clutha District Council following the Pre-Construction Survey. Reports should include (as relevant):
- i) Dates of all site visits.
 - ii) Location, number, and condition of plants in wetlands directly affected by works (prior to works).
 - iii) Number of plants removed from each directly affected wetland and transplanted.
 - iv) Location of translocation sites.
 - v) Location of planting sites for propagated plants.
 - vi) Number of plants planted and planting locations.

NOISE

CONSTRUCTION NOISE

31. A Construction Noise Management Plan shall be prepared and implemented prior to commencement of each stage of construction. This shall be generally in accordance with Section 8 and the relevant annexes of New Zealand Standard NZS6803:1999 *Acoustics - Construction Noise*, which details the types of construction and procedures that will be carried out to ensure compliance with the Standard.

For Stage 1, ~~the Construction Noise Management Plan~~ shall be prepared by independent and appropriately qualified and experienced persons, prior to relevant construction stages commencing, and shall be submitted to the Planning and Environment Manager, Clutha District Council, prior to construction commencing.

For Stage 2, the Consent Holder shall ensure that construction undertaken in accordance with the Construction Noise Management Plan prepared by prepared by Marshall Day Consultants Ltd that forms Part C of the Puke Kapo Hau Mahinerangi Wind Farm Stage 2 – Fast-Track Approvals Act Application dated DD MM 2025.

32. Noise from all construction and decommissioning work, including (but not limited to) the following, shall be measured, assessed and controlled in accordance with New Zealand Standard NZS6803: 1999 *Acoustics - Construction Noise*. Site works
- i) Wind turbine generator assembly and placement
 - ii) Concrete placement
 - iii) Wind turbine removal
 - iv) Foundation demolition and removal
 - v) Land reinstatement

The noise limits shall be those set out in Table 2 of NZS6803 for works of 'long term' duration.

33. The noise associated with concrete manufacture shall be measured in

accordance with ~~NZS6801:1991: Measurement of Sound~~ NZS6801:2008: Acoustics - Measurement of Environmental Sound and assessed in accordance with ~~NZS6802:1991: Assessment of Environmental Sound~~ NZS6802:2008: Acoustics - Environmental Noise. All aspects of concrete manufacture shall not exceed the following noise limits:

7.00am to 10.00pm	55dBA L_{t+0} L_{eq}
10.00pm to 7.00am	45dBA L_{t+0} L_{eq}
10.00pm to 7.00am	75dBA L_{max}

at or within the notional boundary of any dwelling (excluding any dwelling on the wind farm site). ~~Concrete shall not be manufactured outside of the hours of 6.30am to 8.00pm from Monday to Friday, and 7.30am to 6.00pm on Saturdays.~~

OPERATIONAL NOISE (NON-TURBINE)

34. Noise from all other activities on the site (other than wind turbine generator operation and construction activities) shall not exceed the following limits within the notional boundary of any dwelling (excluding any dwelling on the wind farm site):

7:00 am to 10:00 am	55dBA L_{t+0} L_{eq}
10:00 pm to	45dBA L_{t+0} L_{eq}
7:00 am to 10:00 pm to 7:00 am	75dBA L_{max}

The noise shall be measured in accordance with ~~NZS6801:1991: Measurement of Sound~~ NZS6801:2008: Acoustics - Measurement of Environmental Sound and assessed in accordance with ~~NZS6802:1991: Assessment of Environmental Sound~~ NZS6802:2008: Acoustics - Environmental Noise.

OPERATIONAL NOISE (TURBINES)

35. Except as required by Condition 36 below, wind turbine sound levels when measured at the notional boundary of dwellings existing at the date of this consent shall not exceed the appropriate regression curve of the A-weighted background sound level (~~L_{95}~~ L_{90}) by more than 5dBA, or a level of 40dBA ~~L_{95}~~ L_{90} , whichever is the greater.
36. Wind turbine levels when measured at the notional boundary of dwellings existing at the date of this consent at Sites 5 and 6 of Figure 2 of the Hegley Acoustic Consultants Report No. 7511, dated November 2006, shall not exceed the appropriate regression curve of the A-weighted background sound level (~~L_{95}~~ L_{90}) by more than 5dBA, or a level of 35dBA ~~L_{95}~~ L_{90} , whichever is the greater.
37. Prior to installation of any wind turbine generator the consent holder shall submit the following to the Planning and Environment Manager, Clutha District Council:
- An acoustic emissions report to the Council for each of the selected wind turbine generators. The report shall be in accordance with IEC61400-11, *Wind Turbine Generator Systems Part 11, Acoustic noise measurement techniques*, and shall include the A-weighted sound power levels, spectra, and tonality at integer wind speeds from 6 to 10 m/s and up to 95% of rated power for each type and mode of individual wind

turbine to be installed.

- ii) A noise prediction report from an independent and suitably qualified and experienced acoustical consultant that demonstrates that the sound levels from the wind farm will not exceed those levels set out in Conditions 35 and 36 above. Modes of operation and the type of turbine must be specified. For the avoidance of doubt, this resource consent does not authorise the use of a stall turbine design.
- iii) A report setting out the results of pre-installation testing in accordance with Condition 38. Upon receiving this report Council may consider the background sound levels at the qualifying dwellings at times when wind turbine generators would be operating and review whether these dwellings are appropriately protected by the provisions of Condition 36. Qualifying dwellings are those dwellings that are not already referred to in Condition 36, that are inside the predicted 35dBA contour, and from which written approval for the wind farm has not been obtained.

PRE-INSTALLATION MEASUREMENTS

38. Background sound levels shall be measured and assessed using NZS6808:-
~~1998~~2010 *Acoustics - The Assessment and Measurement of Sound from Wind Turbine Generators* within the notional boundary of any dwelling, except for lots where written approval has been obtained, but with the following requirements to be met. Where these differ from NZS6808: ~~1998~~2010, the following requirements shall prevail:
- i) Representative measurement locations shall be selected for all dwellings within the predicted 35dBA_{Leq} noise contour.
 - ii) The requirements for background sound level measurements under this condition shall not apply to any property where:
 - written approval has been obtained; or
 - where access for measurement purposes has been refused by the property owner or tenant, and monitoring cannot take place at a nearby representative location.
 - iii) Sufficient data must be collected to assess the background sound levels in accordance with NZS6808: ~~1998~~2010 but also specifically at the following times:
 - when operational wind speeds of the wind turbines are fairly representative of the cut-in wind speed and the rated power wind speed at the wind farm and at wind speeds in between; and
 - between 10pm and 5am, to allow a separate analysis to be undertaken during this time period.

Sufficient data is when regression curves are representative of the range of wind speeds and wind directions generally expected at the wind farm site.
 - iv) Care will be taken to eliminate periods of contamination of the noise data by other noise sources, i.e. seasonal cicadas, crickets, frogs, rainfall periods, etc.

POST-INSTALLATION TESTING

39. Post-installation compliance testing shall commence as soon as practicable once turbines are installed and *commissioned*. If possible the testing shall be carried out at the same locations as the background sound monitoring or, if that position is not available, then at a nearby location where the background sound monitoring is still representative.
40. The same *requirements* as in Condition 38 for the background noise monitoring shall also be measured for the post-installation compliance testing. The cut-in operation times of the wind turbine generators shall also be recorded and this shall be indicated on the results.
41. The best fit *regression* curves shall be provided in accordance with Condition 38.
42. The appropriate regression curve of the L95, 10 min of the wind turbine generator sound levels corrected for any special audible characteristics is not to exceed the noise limits specified in Conditions 35 and 36.
43. As compliance testing takes place at each site, the consent holder shall make available the raw results of noise and wind monitoring to the Planning and Environment Manager, Clutha District Council, in a form that will allow the Council to undertake its own analysis and assessment of the results should it choose to do so.
44. The consent holder shall provide reports to the Planning and Environment Manager, Clutha District Council, as soon as possible following testing at each location but no longer than 21 days after the completion of each test.
45. In the event that substantiated complaints are received in circumstances not specifically provided for in these conditions, Clutha District Council may reasonably direct testing to take place at any location, and nothing in these conditions shall prevent compliance monitoring of wind farm noise from being undertaken at any wind speed and direction, or time of day.
46. If Clutha District Council wishes to undertake separate compliance testing of part, or of all of the wind farm operation then the consent holder shall share with Clutha District Council any wind data to allow noise monitoring to be analysed in accordance with the requirements of these conditions.
47. Thereafter, compliance testing shall be carried out following any reasonable request by Clutha District Council. This may be as a result of what the council considers to be substantiated complaints regarding increased levels of noise from the wind farm, or any change in the character of the noise emanating from the wind turbine generators.
48. Sound monitoring shall conform to the following measurement standards:
 - i) The complete measurement and analysis system shall conform to the requirements of NZS6808: ~~1998~~2010 *Acoustics - The Assessment and Measurement of Sound from Wind Turbine Generators* and the Standards referred to by NZS6808.
 - ii) Microphones shall be fitted with a wind shield such that the noise generated by wind on the wind shield is, to the extent practicable, at least 10dBA below the noise being measured.

- iii) All sound monitoring shall be carried out by independent and suitably qualified and experienced persons.
49. The operator of the wind turbines shall pay all costs associated with compliance testing.

ASSESSMENT OF SPECIAL AUDIBLE CHARACTERISTIC

50. When wind farm sound within the notional boundary of a dwelling has a special audible characteristic, i.e. impulsiveness, tonality and/or an audible modulation, the measured sound level of the source shall have a 5dB penalty applied by adjustment of the measured sound level by the arithmetic addition of the penalty. If the Joint Nordic Method Version 2 is used to assess tonality then the penalty shall be as described in that Standard. If more than one penalty is relevant to any measured sound level then only the penalty with the greatest numerical value shall be applied.
51. Sound with a special audible characteristic includes clearly audible tones. A test for the presence of tonality shall be made by comparing the levels of neighbouring one-third octave bands in the sound spectrum. An adjustment of +5dB for tonality shall be applied if the level (Leq) in any one third octave band exceeds the arithmetic mean of the Leq levels in the two adjacent bands by more than the values given in Table 1.

Table 1- One-third Octave Band Level Differences

One-third octave band	Level difference
25 - 125Hz	12dB
160 - 400Hz	8dB
500 - 10,000Hz	5dB

52. There might be cases where this analysis does not result in a tonal component being defined although the sound is in fact tonal. For these cases it will be necessary to undertake a narrow band analysis in order to determine if a sound is tonal using Joint Nordic Method Version 2 with the penalties in that document applied.
53. A test for modulation is if the measured peak to trough levels exceed 5dBA on a regularly varying basis or if the spectral characteristics, third octave band levels, exhibit a peak to trough variation that exceeds 6dB on a regular basis in respect of the blade pass frequency.

NON-COMPLIANCE WITH NOISE CONDITIONS

54. Where compliance is not achieved with these Noise Conditions then the consent holder shall operate the wind turbine generators at reduced noise output until remedies are identified and implemented. If sound emissions cannot be reduced such that they comply, then the consent holder shall cease to operate the non-compliant wind turbine generators until modifications are made to reduce the noise. Further operation of the non-compliant wind turbine generators shall only be for sound measurement checks as specifically agreed with Planning and Environment Manager, Clutha District Council, to demonstrate compliance. This condition shall not limit or restrict any statutory right or power to take enforcement action that Clutha District Council may

have under the provisions of the Resource Management Act 1991.

NOISE MANAGEMENT PLAN

55. Prior to the commencing operation of either Stage 1 or 2 of the wind farm the consent holder shall prepare and implement a Noise Management Plan to manage the potential effects of noise. The Noise Management Plan shall be prepared by an independent person suitably qualified and experienced in noise assessment and control. That person shall act in liaison with the consent holder.
56. The Noise Management Plans shall include, but not be limited to, the following:
- i) An assessment of the contribution to the overall sound levels from individual wind turbine generators.
 - ii) An assessment of how individual wind turbine generators can be made to comply with Conditions 35 and 36.
57. The information collected as part of the implementation of the Noise Management Plans shall be provided to the Planning and Environment Manager, Clutha District Council.

CONTACT AND COMPLAINTS PROCEDURE

58. The consent holder shall establish and publicise a local telephone number or internet site so that members of the local community have a specified and known point of contact should they ~~to raise~~have any noise related issues that may arise during construction and operation of the wind farm. A log book of all calls made shall be kept, and details of all calls received and any action taken shall be made available to the Planning and Environment Manager, Clutha District Council, within five working days. Any issues arising shall be reviewed and addressed by revising the Noise Management Plan where appropriate.
59. The consent holder shall nominate an appropriately experienced staff member to be responsible for the following:
- i) Liaison with residents.
 - ii) Overseeing the assessment procedure.
 - iii) Receiving and dealing with complaints.

REVIEW OF NOISE CONDITIONS

60. Notwithstanding the provisions in Condition 8, Clutha District Council may review the noise conditions set out above, by giving notice of its intention to do so under s.128 of the Resource Management Act 1991, one, three and five years after the wind farm completion or, if the wind turbine generators are installed in stages, then one year after the completion of each stage and then three and five years after the final completion, for the following purposes:
- i) To deal with any adverse effects on the environment resulting from wind farm sound, including sound with any special audible characteristics, which may arise from the operation of the wind turbines.
 - ii) To review the adequacy of any recommendations of the Noise

Management Plan.

- iii) To address any issues arising out of complaints.
- iv) Such reviews may take place within six months of the specified dates.

TRAFFIC CONDITIONS

61. A ~~Construction~~ Traffic Management Plan shall be submitted by the consent holder to the Chief Executive of Clutha District Council before any access to the site by construction traffic begins. The purpose of the ~~Construction~~ Traffic Management Plan will be to set out and detail the extent and timing of construction traffic activity, and any temporary traffic management provisions to be put in place during this time. The ~~Construction~~ Traffic Management Plan shall include the following requirements:
- i) The plan shall be prepared after consulting with the Dunedin City Council and ~~Transit New Zealand~~ the New Zealand Transport Agency Waka Kotahi as road controlling authorities, and shall implement the outcome of that consultation.
 - ii) Set out the nature and timing of local physical improvement works to be undertaken on the roading network at the consent holder's cost to accommodate access to the Mahinerangi Wind Farm. These works shall include the following as a minimum:
 - a) The upgrading of routes used for transport of materials by other than light vehicles to ensure the safe operation of the road including works to ensure that two vehicles (other than over-dimension vehicles) can safely pass each other based on vehicle tracking that is consistent with the operating speed of the road.
 - b) The upgrading of routes used for transport of over-weight and over-dimension vehicles to provide for the swept path of vehicles on horizontal curves.
 - c) The upgrading of local access routes used for transport of materials by heavy vehicles (defined as vehicles that require a heavy vehicle licence to operate) to an all-weather surface where necessary and only on those uphill sections of the routes heading towards the Mahinerangi Wind Farm with gradients 10% or steeper.
 - d) The provision of school-bus bays beyond the traffic lane at all pickup and drop-off points on routes used for transport of materials by other than light vehicles.
 - e) The installation of suitable passing/stopping bays, in agreed locations, if considered necessary by the road controlling authority.
 - iii) Detail the intended traffic arrangements and provisions for the delivery of over-weight and over-dimensioned major components to the site, including any time restrictions for the movement of over-weight and over-dimensioned vehicles. No heavy construction traffic will access the site except via Mahinerangi Road and El Dorado Track and

between the hours of 7.00 am and 10.00 pm. This does not prevent the use of any other roads between the port and State Highway 87 outside these hours. This may require the development of a layby for temporary parking of such vehicles before they reach Mahinerangi Road.

- iv) Manage construction traffic (other than component delivery by over-dimension and over-weight vehicles) during the construction phase. This shall include as a minimum:
 - a) Identification of all roads within Clutha District that are to be used by construction traffic (Waipori Falls Road shall not be used for any construction traffic).
 - b) The provision for the notification of the principals of all schools along routes to be used by construction traffic of the commencement and cessation of seasonal construction periods.
 - c) The provision for dust suppression on the routes used for the transport of goods to the site.
 - d) Ensuring that all construction traffic within Clutha District utilises those roads that have been identified for use by construction traffic in the [Construction](#) Traffic Management Plan.
 - e) Ensuring that all heavy vehicles associated with construction are clearly identified with labels to confirm that they are associated with the Mahinerangi Wind Farm to facilitate the monitoring of vehicle movements. The labels shall also provide a phone number to enable any complaints to be made.
 - f) The management practices to be adopted to avoid conflict with stock droving on the affected roads.

62. The existing condition of all roads to be used by construction traffic, other than light vehicles, in Clutha District (as identified in the [Construction](#) Traffic Management Plan) shall be investigated and reported upon in a Base Condition Report that shall be prepared by the consent holder. The Base Condition Report shall contain information including classified traffic counts, high speed data capture, system recording - profile, texture and roughness and falling weight deflectometer. The Base Condition Report shall identify the existing condition of roads, those roads that require upgrading, potential remedial works during construction, and monitoring requirements during and at the end of the construction period. A Draft Base Condition Report shall be lodged with the Chief Executive of the Clutha District Council not less than nine months prior to the commencement of construction works at the project site.

63. The Chief Executive of Clutha District Council may appoint a technical peer reviewer to review the Draft Base Condition Report and to certify its adequacy prior to the Base Condition Report being formally accepted by the Chief Executive and construction works commencing at the project site. The cost of retaining the services of the technical peer reviewer shall be met by the consent holder.

64. The consent holder shall be responsible for the maintenance of roads subject to the Base Condition Report for the duration of the construction period except for any maintenance, repairs or reconstruction of these roads arising from unusual or extreme weather events. The consent holder shall prepare a Maintenance Standard Report that will detail the minimum level of service to be provided by the consent holder on the roads. A Draft Maintenance Standard Report shall be lodged with the Chief Executive of Clutha District Council not less than nine months prior to the commencement of construction works at the project site.
65. The Chief Executive of Clutha District Council may appoint a technical peer reviewer to review the Draft Maintenance Standard Report and to certify its adequacy prior to the Maintenance Standard Report being formally accepted by the Chief Executive and construction works commencing at the project site. The cost of retaining the services of the technical peer reviewer shall be met by the consent holder. The Chief Executive may require the consent holder to produce an Additional Base Condition Report during the construction period, where road condition appears to be worse than determined in the Maintenance Standard Report. The Additional Base Condition Report may be subject to review by a technical peer reviewer, with the cost met by the consent holder.
66. For the avoidance of doubt, the consent holder will only be responsible for the costs of maintenance of the roading network to the extent that the costs are additional to those that would be anticipated by Clutha District Council in the normal course of events (ie the consent holder will pay a reasonable proportion of the costs of maintenance required as a result of the use of the roads by wind farm construction traffic).
67. The consent holder shall be responsible for preparing a Post-construction Condition Report at the conclusion of construction works with respect to all roads subject to the Base Condition Report. A Draft Post-construction Condition Report shall be lodged with the Chief Executive and shall provide data with respect to road conditions that is consistent with that contained in the Base Condition Report. The Post-construction Condition Report may be reviewed by a technical peer reviewer at the cost of the consent holder prior to the Post-construction Condition Report being formally accepted by the Chief Executive.
68. The consent holder shall ensure that roads subject to the Base Condition Report are restored to a standard that is consistent with or exceeds the condition recorded in the Base Condition Report.

ACCIDENTAL DISCOVERY PROTOCOL

- 69A The Consent Holder shall ensure that the construction of the Puke Kapo Hau Mahinerangi Wind Farm Stage 2 is undertaken in accordance with the requirements of the Archaeological Management Plan that forms Part C of the Puke Kapo Hau Mahinerangi Wind Farm Stage 2 – Fast-Track Approvals Act Application dated DD MM 2025.
69. The consent holder shall ensure that all construction personnel involved in site disturbance activities are suitably trained in the requirements of the Accidental Discovery Protocols, and identification of archaeological sites and/or artefacts.

70. If *koiwi tangata* (human skeletal remains), *taonga* or archaeological artefacts are discovered during site construction, the consent holder shall, without delay:
- i) Cease all work within a 50 m radius of the discovery and secure the area.
 - ii) Notify their nominated archaeologist, the consent authority, the appropriate *runanga*, ~~the New Zealand Historic Places Trust~~Heritage New Zealand Pouhere Taonga, and in the case of *koiwi tangata* (skeletal remains), the New Zealand Police.
 - iii) Enable a site inspection by ~~the New Zealand Historic Places Trust~~Heritage New Zealand Pouhere Taonga and the appropriate *runanga*, and their advisors, who shall determine the nature of the discovery and the further action required, including whether an Archaeological Authority is required under the ~~Historic Places Act 1993~~ Heritage New Zealand Pouhere Taonga Act 2014.
 - iv) Any *koiwi tangata* or *taonga* shall be handled and removed by tribal elders responsible for the *tikanga* (custom) appropriate to its removal and preservation.
 - v) Ensure that the further action identified in accordance in part (iii) of this condition is undertaken.
 - vi) Upon completions of tasks (i) to (v) above, and provided all statutory permissions have been obtained, the consent holder may recommence site construction following consultation with the consent authority, appropriate *runanga*, ~~the New Zealand Historic Places Trust~~Heritage New Zealand Pouhere Taonga, and in the case of *koiwi tangata* (skeletal remains), the New Zealand Police.
71. The consent holder shall, in consultation with *manawhenua* and ~~the New Zealand Historic Places Trust~~Heritage New Zealand Pouhere Taonga, develop a comprehensive Accidental Discovery Protocol, which will form part of the consent holder's Environmental Construction Management Plan. The protocol shall develop in more detail the processes required in Conditions 70(i) and (ii) above. The protocol shall also include, but not be limited to, identifying the roles and responsibilities of the consent holder and the other involved parties, providing contact details and identifying reporting requirements.

COMMUNITY CONSULTATION

72. The consent holder shall establish and co-ordinate a Consultative Group for the Mahinerangi Wind Farm that is to be consulted, as a minimum, at least six monthly during the construction phase and the first two years of the operation of the wind farm and thereafter at a frequency to be determined by a majority of the Consultative Group itself. This does not restrict the ability of individual Consultative Group members from calling meetings at shorter intervals to deal with any interim matters that need to be addressed before the next scheduled meeting.
73. The objective of the group will be to facilitate information flow between the consent holder's management team and the community, and will be an on-going point of contact between the consent holder and the community. The functions of the group shall also include acting as a forum for relaying community concerns about the construction and on-going operation of the wind farm to the consent holders on-site management, developing acceptable means of addressing (where possible) and managing those concerns, and reviewing the implementation of measures to resolve and manage community

concerns.

74. The consent holder shall be responsible for convening the meetings of the group and shall cover the direct costs associated with the establishment and operation of the group. The consent holder shall be responsible for the keeping and distribution of the group's minutes to all participants in the group.
75. The consent holder shall notify its intention to establish a Consultative Group for the Mahinerangi Wind Farm project by public notice. As a minimum, the consent holder shall invite the following to participate in the Consultative Group:
- i) Representatives of property owners and occupiers on local roads identified for use by construction traffic as nominated by ~~the relevant Clutha District Council. (1 rep. from each Council area)~~
 - ii) Representatives of the Lee Stream School (1 rep.).
 - iii) The operator of the school-bus routes in the area (1 rep.).
 - iv) Clutha District Council or relevant Community Board (1 rep.).
 - v) Dunedin City Council or relevant Community Board (1 rep.).
 - vi) The Otago Conservator or delegate or Department of Conservation.
 - vii) *Iwi* representatives (1 rep. from each *runanga*).
 - viii) Local residents (1 rep.).
 - ~~ix) A delegate elected by the members of the ULPS Incorporated while that group remains incorporated (1 rep.).~~
- The consent holder shall not be in breach of this condition if any one or more of the above parties specified above do not wish to be members of the group or to attend any particular meeting.
76. The Consultative Group shall cease to exist if a 75% majority of the group vote that it is no longer necessary.

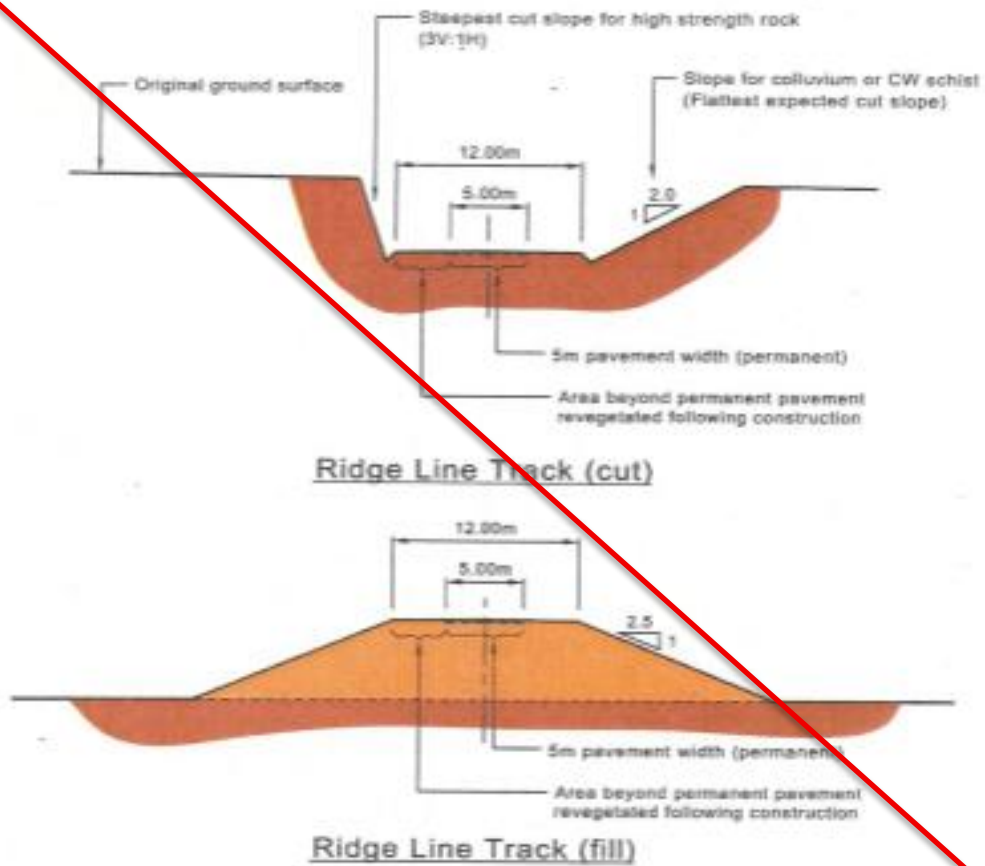
COMPLAINT REGISTER

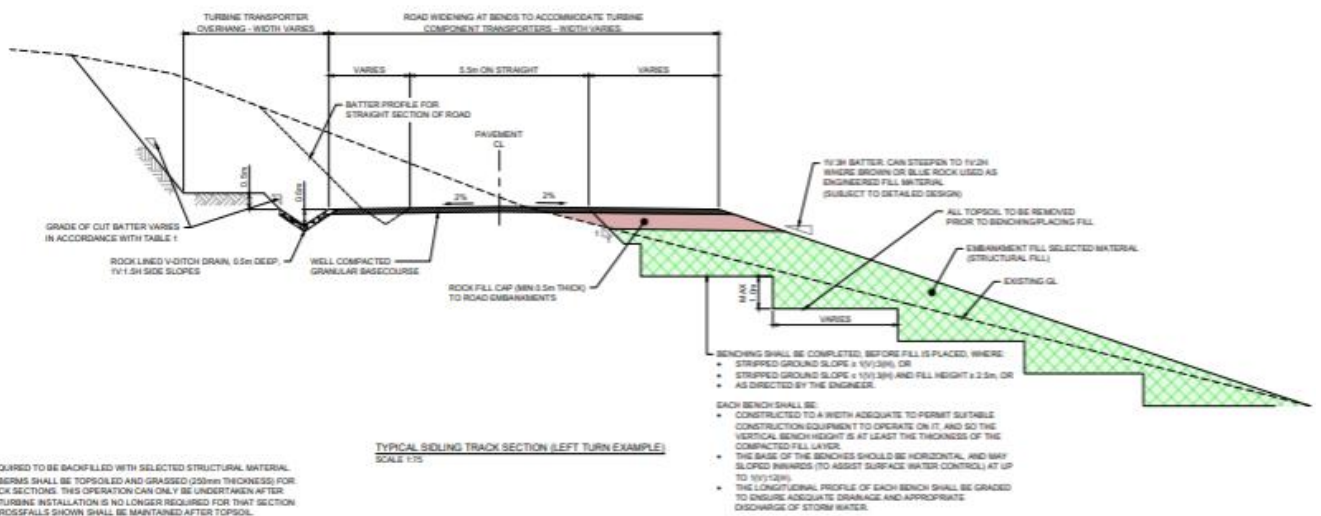
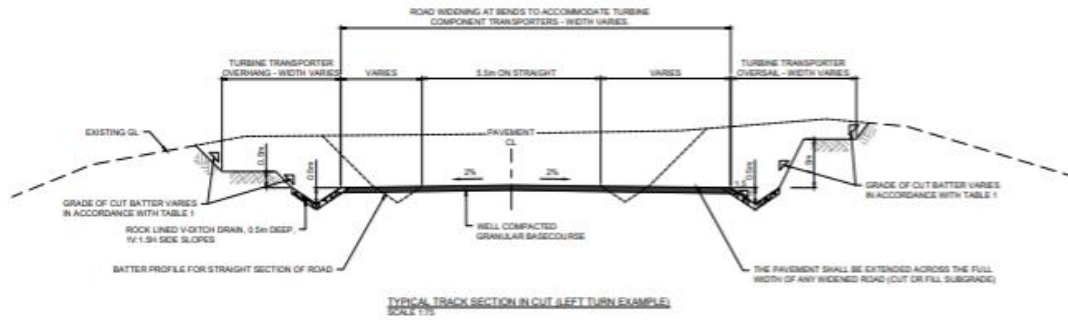
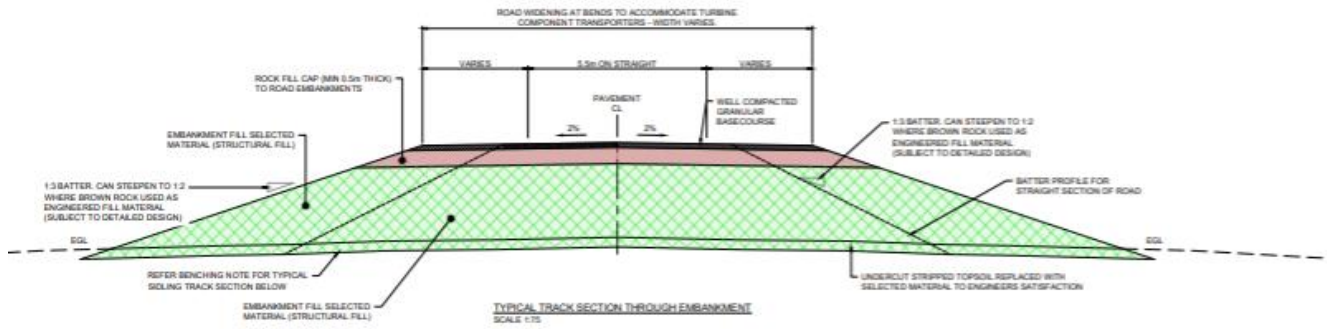
77. Notwithstanding the requirements of Condition 58, which refers to noise, the consent holder shall maintain and keep a Complaints Register to record any complaints about the construction activities and operation of the wind farm received by the consent holder in relation to traffic, noise, dust, shadow flicker or blade glint. The Register shall also record, where the following information is available:
- i) The date, time and duration of the incident that has resulted in a complaint.
 - ii) The location of the complainant when the incident was detected.
 - iii) The possible cause of the incident.
 - iv) Any corrective action undertaken by the consent holder in response to the complaint, including timing of that corrective action.
80. The Complaints Register shall be available to Clutha District Council and the

Consultative Group at all reasonable times upon request. Complaints received by the consent holder that may infer non-compliance with the conditions of this resource consent shall be forwarded to the Planning and Environment Manager, Clutha District Council, within 48 hours of the complaint being received.

APPENDIX A

TYPICAL ACCESS TRACK CROSS-SECTIONS





- NOTES
1. UNDERCUT IF REQUIRED TO BE BACKFILLED WITH SELECTED STRUCTURAL MATERIAL.
 2. AT COMPLETION BERMS SHALL BE TOPSOILED AND GRASSED (250mm THICKNESS) FOR ALL ACCESS TRACK SECTIONS. THIS OPERATION CAN ONLY BE UNDERTAKEN AFTER THE CRANE FOR TURBINE INSTALLATION IS NO LONGER REQUIRED FOR THAT SECTION OF TRACK. THE CROSSFALLS SHOWN SHALL BE MAINTAINED AFTER TOPSOIL.

Figure 1

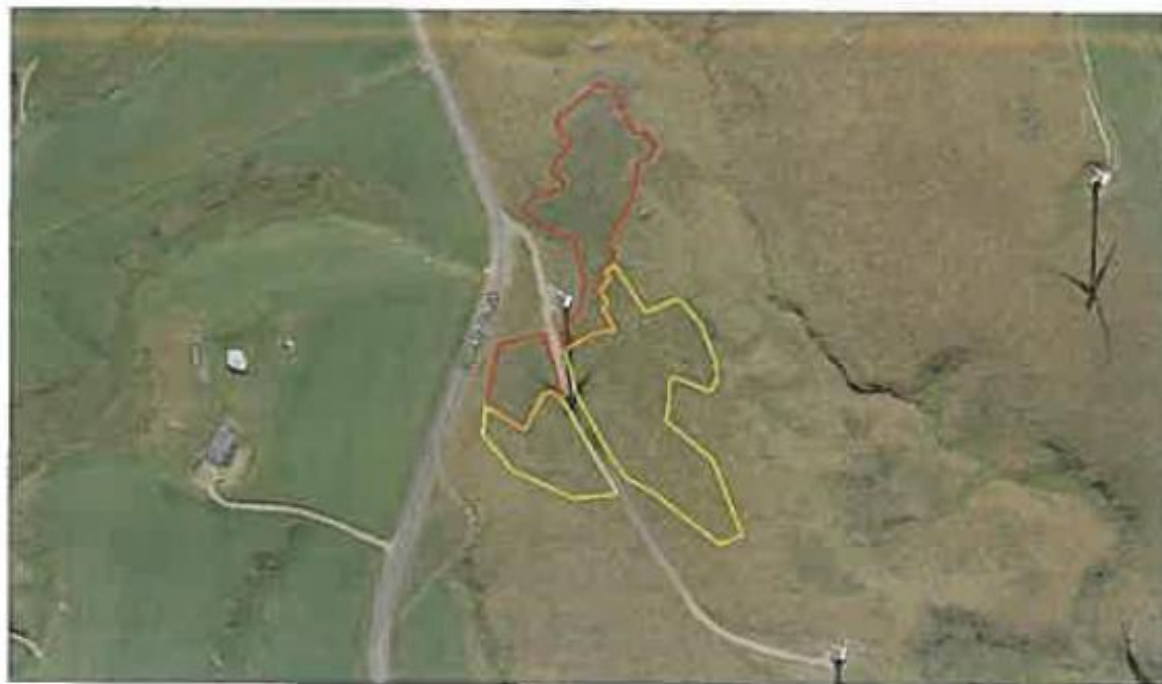


Figure 1: Tussock rehabilitation sites within the Scrappy Pines QEII covenant located in areas dominated by exotic grasssland (Red polygons: total area approximately 1.50 ha) and areas of lower tussock density (yellow pololygon: of which approximately 0.50 ha can be planted)

Figure 2

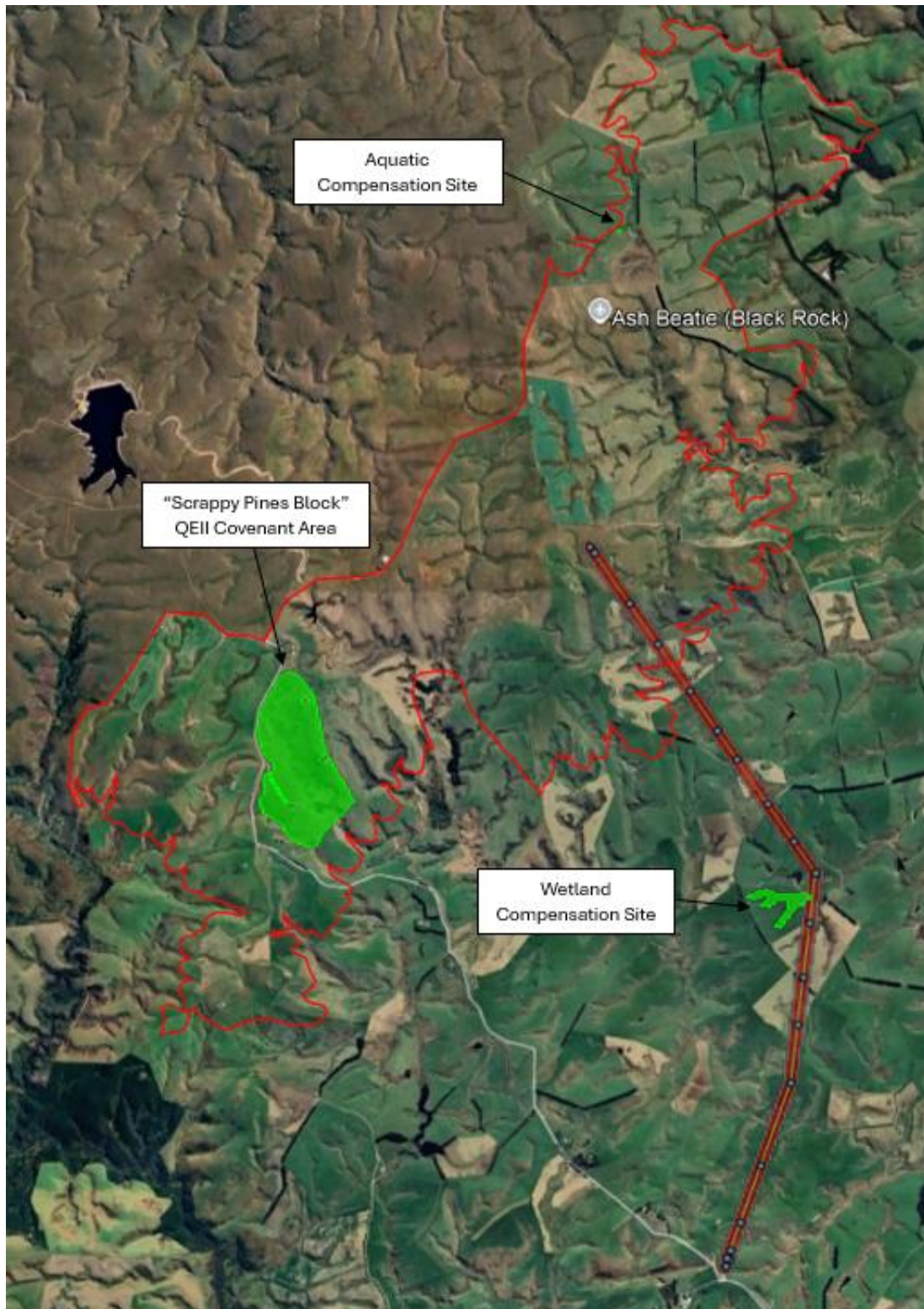


Figure 2: Compensation Sites