

Project Approval

Section 75J of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure under delegation from the Minister enforced from 1 October, 2011, I approve the project application referred to in Schedule A, subject to the conditions specified in Schedules B-G.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

[NB. MOD 1 was withdrawn prior to determination]

Red type represents the July 2015 modification (MOD 2)

Blue type represents the March 2016 modification (MOD 3)

Green type represents the May 2017 modification (MOD 4)

**Deputy Director-General
Development Assessment & Systems Performance**

Sydney

2012

SCHEDULE A

Application No.:	MP 10_0160
Proponent:	White Rock Wind Farm Pty Ltd
Approval Authority:	Minister for Planning
Land:	The land shown in Appendix 1
Project:	White Rock Wind Farm Project

TABLE OF CONTENTS

DEFINITIONS	3
SCHEDULE B	5
ADMINISTRATIVE CONDITIONS	5
TERMS OF APPROVAL	5
LIMITS OF APPROVAL	5
STATUTORY REQUIREMENTS	6
STAGING	6
COMPLIANCE	6
NOTIFICATION OF DEPARTMENT	6
UPDATING & STAGING OF STRATEGIES, PLANS OR PROGRAMS	6
SCHEDULE C	8
ENVIRONMENTAL PERFORMANCE	8
BIODIVERSITY	8
Clearing	8
Detailed Design & Micro-Siting	8
Bird and Bat Monitoring and Management	8
Biodiversity Offset Package	9
SOIL, WATER QUALITY AND HYDROLOGY	10
Waterways	10
HAZARDS AND RISK	10
Aviation Obstacles and Hazards	10
Bushfire Risk	11
Telecommunications	11
NOISE	11
Overhead Transmission Line	11
WASTE MANAGEMENT	11
Waste Generation and Management	11
UTILITIES AND SERVICES	12
VISUAL AMENITY	12
Views	12
Turbine and Associated Infrastructure External Design	12
Shadow Flicker	12
Visual Appearance	12
Night Lighting	12
Design and Landscaping	13
PROPERTY IMPACTS	13
Crown Land	13
Trigonometric Reserves	13
Mineral Resources	13
SCHEDULE D	14
COMMUNITY INFORMATION REPORTING AND AUDITING	14
COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT	14
Community Consultative Committee	14
Complaints and Enquiries Procedure	14
Provision of Electronic Information	14
Revision of Strategies, Plans and Programs	15
COMPLIANCE MONITORING AND TRACKING	15
Compliance Tracking Program	15
Incident Reporting	15
OPERATIONAL PERFORMANCE	16
Operation Performance Audit Report	16
SCHEDULE E	18
CONSTRUCTION ENVIRONMENTAL MANAGEMENT	17
AIR QUALITY	17
Dust Generation	17
HERITAGE	17
NOISE AND VIBRATION	17
Construction or Decommissioning Hours	17
Construction Noise and Vibration	18
PROPERTY IMPACTS	18
SOIL, WATER QUALITY AND HYDROLOGY	18
Construction Soil and Water Management	18
TRANSPORT AND ACCESS	19
Road Dilapidation	19
Road Upgrades	19
ANCILLARY FACILITIES	20

ENVIRONMENTAL REPRESENTATIVE	20
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN	21
SCHEDULE F	27
OPERATIONAL ENVIRONMENTAL MANAGEMENT	26
HAZARD AND RISK	26
Safety Management System	26
Television and Radio Interference	26
ECOLOGY	26
Rehabilitation and Revegetation	26
NOISE	27
Background Noise Survey and Verification Report	28
Operational Noise Criteria – Wind Turbines	28
Operational Noise Criteria – Ancillary Infrastructure	28
Operating Conditions	27
OPERATIONAL ENVIRONMENTAL MANAGEMENT	28
SCHEDULE G	30
ADDITIONAL PROCEDURES	29
Land Acquisition and Criteria	29
DECOMMISSIONING	30
Decommissioning Road Dilapidation	31
DECOMMISSIONING ENVIRONMENTAL MANAGEMENT PLAN	32
APPENDIX 1: PROJECT LAYOUT AND SCHEDULE OF LAND	34
APPENDIX 2: BACKGROUND NOISE SURVEY AND VERIFICATION REPORT	36
APPENDIX 3: NOISE COMPLIANCE ASSESSMENT	37

DEFINITIONS

Act, the	<i>Environmental Planning and Assessment Act 1979</i>
Ancillary facility	Temporary facility for construction, including for example an office and amenities compound, construction compound, batch plant (concrete or bitumen), materials storage compound, maintenance workshop, testing laboratory or material stockpile area.
Alternative transmission line	Includes the transmission line, support poles and associated 50 m wide easement, referred to as the Alternate 132kV Overhead Line on the Figure in Appendix 1.
CEMP	Construction Environmental Management Plan
Conditions of Approval	The Minister's conditions of approval for the project.
Construction	Includes all work in respect of the project other than: a) survey, acquisitions, building/ road dilapidation surveys; b) investigative drilling, excavation, or salvage; c) minor clearing or translocation of native vegetation; d) establishing ancillary facilities/ construction work sites (in locations meeting the criteria identified in the conditions of approval); e) installation of environmental impact mitigation measures, fencing, enabling works; f) other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/ utilities, etc). Note - work where heritage, threatened species, populations or endangered ecological communities would be affected, is classified as construction, unless otherwise approved by the Secretary in consultation with the Office of Environment and Heritage/ Environment Protection Authority.
Councils	Glen Innes Severn and Inverell Councils
Decommissioning	The removal of wind turbines and any associated above ground infrastructure
Department, the	The Department of Planning and Environment
DPI	Department of Primary Industry
Dust	Any solid material that may become suspended in air or deposited
EA	<i>White Rock Wind Farm Environmental Assessment (Epuron, April 2011)</i> as amended by: • the Submissions Report; • the Modification Application seeking administrative changes to the conditions of approval, dated 15 June 2015 (MOD 2); • the Modification Application for changes to construction and operation infrastructure dated December 2015 and supporting documents dated March 2016 (MOD 3); and • the Modification Application for the alternative transmission line alignment and substation dated January 2017, including associated response to submissions and supplementary information relating to additional vegetation clearing, dated 21 April 2017 (MOD 4).
EEC	Endangered ecological community listed under the <i>Threatened Species Conservation Act 1995</i> .
EPA	Environment Protection Authority
Heritage Item	Means an item as defined under the <i>Heritage Act 1977</i> .
EPL	Environment Protection Licence under the <i>Protection of the Environment Operations Act 1997</i> .
Micro-Siting	Means a location allowance of 100 metres radius for project components as long as impacts remain consistent with that assessed.
Minister, the	Minister for Planning
Non-associated residence	Any residence on privately-owned land where the landowner has not reached a financial or in kind agreement with the Proponent in relation to the project.
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
Operation	Means the operation of the project, but does not include commissioning trials of equipment or temporary use of parts of the project during construction.
Primary access point	The main entrance for vehicles entering and exiting the project site onto the

Gwydir Highway.

Project	The project that is the subject of the project application MP 10_0160.
Publicly available	Available for inspection by a member of the general public (for example available on an internet website).
Reasonable and feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account mitigation benefits and cost of mitigation versus benefits provided, community views and nature and extent of potential improvements. Where requested by the Secretary, the Proponent shall provide evidence as to how reasonable and feasible measures were considered and taken into account.
Registered Aboriginal Stakeholders	Aboriginal stakeholders identified as registered stakeholders in the Environmental Assessment.
RFS	NSW Rural Fire Service
RMS	NSW Roads and Maritime Services
Secretary	Secretary of the Department or nominee
Site	The land defined in Appendix 1
Submissions Report	<i>White Rock Wind Farm Submissions Report (Epuron, November 2011)</i>
Surveyor General	Of New South Wales.

SCHEDULE B ADMINISTRATIVE CONDITIONS

TERMS OF APPROVAL

- B1. The Proponent shall carry out the project:
- (a) generally in accordance with the EA; and
 - (b) in accordance with the conditions of this approval.

Note: The general layout of the project is depicted in the figure in Appendix 1.

- B2. If there is any inconsistency between the documents referred to in condition B1, the most recent document shall prevail to the extent of any inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
- B3. The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
- (a) any strategies, plans, programs, reviews, audit correspondence that are submitted in accordance with the requirements of this approval;
 - (b) any report, reviews or audits commissioned by the Department regarding compliance with this approval; and
 - (c) the implementation of any actions or measures contained in these documents.
- B4. Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.

LIMITS OF APPROVAL

- B5. This Approval lapses 5 years after the date of this Approval unless the Proponent has confirmed to the satisfaction of the **Secretary** that orders have been placed for wind turbines, or demonstrated that work subject of this Approval has been completed on the Site before the date on which the Approval would otherwise lapse under this condition. Work, for the purpose of this condition includes at least one of the following:
- (a) internal track construction;
 - (b) civil works associated with the construction of the foundations for the wind turbine footings;
 - (c) control room construction;
 - (d) electrical substation construction;
 - (e) underground cabling; or
 - (f) internal overhead transmission line construction.
- B6. The project shall not exceed 119 wind turbines.
- B7. If any wind turbine is not used for the generation of electricity for a continuous period of 12 months, it shall be decommissioned by the Proponent, unless otherwise agreed by the **Secretary**. The Proponent shall keep independently-verified annual records of the use of wind turbines for electricity generation. Copies of these controls shall be provided to the **Secretary** upon request. The relevant wind turbine and any associated infrastructure is to be dismantled and removed from the site by the Proponent within 18 months of the date that the wind turbine was last used to generate electricity.
- B8. Prior to the commencement of construction, the Proponent shall provide written evidence to the satisfaction of the **Secretary** that the lease agreements with the site landowners have adequate provisions to require that decommissioning occurs in accordance with this approval, and is the responsibility of the Proponent.

STATUTORY REQUIREMENTS

- B9. The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation of the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the site at all times during the project.
- B10. For the purpose of section 75S(2)(b) of the EP&A Act, the *relevant provisions*, as defined in section 75S(1A) of the EP&A Act, apply to this approval.

STAGING

- B11. The Proponent may construct, operate and decommission the project in stages.

Where staging of the project is proposed, the conditions of this approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).

- B12. Deleted.

COMPLIANCE

- B13. Deleted.

- B14. Deleted.

- B15. In the event of a dispute between the Proponent and a public authority, in relation to an applicable requirement in this approval or relevant matter relating to the project, either party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.

NOTIFICATION OF DEPARTMENT

- B16. Prior to the commencement of the construction, operation and/or decommissioning of the project, the Proponent shall notify the Department in writing of the date of commencement of the relevant stage. If the construction, operation and/or decommissioning of the project is to be staged, then the Proponent must:
- (a) notify the Department in writing prior to the commencement of the relevant stage, and clearly identify the development that would be carried out during the relevant stage; and
 - (b) inform the local community and the Community Consultation Committee about the proposed staging plans.

UPDATING & STAGING OF STRATEGIES, PLANS OR PROGRAMS

- B17. With the approval of the Secretary, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.

To ensure the strategies, plans or programs under the conditions of this approval are updated on a regular basis, the Proponent may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Proponent may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant condition of this approval.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Proponent must ensure that all development being carried out on site is covered by suitable strategies, plans or programs at all times.*
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.*

SCHEDULE C ENVIRONMENTAL PERFORMANCE

BIODIVERSITY

Clearing

C1. The Proponent shall:

- (a) minimise the clearing of native vegetation on site; and
- (b) not clear more than 28 hectares of the Ribbon Gum - Mountain Gum – Snow Gum Grassy Forest/Woodland of the New England Tableland Bioregion EEC on site.

C2. Tree trunks and major branches from cleared trees should be used, to the fullest extent practicable, to enhance habitat (coarse woody debris) in rehabilitated areas or in derived native grassland (either in offset areas or areas adjoining impacted areas) and included in the Construction Flora and Fauna Management Plan contained in condition E22.

Detailed Design & Micro-Siting

C3. All reasonable and feasible effort shall be made to locate wind turbines at least 30 metres from adjacent hollow-bearing trees which have the potential to provide roost or nesting habitat for bird and bat species identified to be at risk of rotor collision during turbine operation.

C4. Where micro-siting is proposed, the Proponent shall identify the proposed turbine locations in the CEMP, and demonstrate how those locations will not give rise to increased landscape, vegetation, cultural heritage, visual amenity, shadow flicker, noise, fire risk or aviation impacts when compared with the approved locations.

C5. All reasonable and feasible effort shall be made to avoid native vegetation disturbance (including clearing of hollow bearing trees) during micro-siting and construction of the project so as to reduce as far as possible the extent of vegetation disturbance required for the project.

Bird and Bat Monitoring and Management

C6. Prior to the commencement of construction, the Proponent shall prepare and submit for the approval of the Director-General a **Bird and Bat Adaptive Management Program**, which takes into account bird/ bat monitoring methods identified in the current editions of AusWEA *Best Practice Guidelines for the Implementation of Wind Energy Projects in Australia* and *Wind Farm and Birds: Interim Standards for Risk Assessment*. The Program shall be prepared and implemented by a suitably qualified expert, approved by the **Secretary**. The Program shall incorporate **Monitoring, and a Decision Matrix** that clearly sets out how the Proponent will respond to the outcomes of monitoring. It shall:

- (a) incorporate an ongoing role for the suitably qualified expert;
- (b) set out monitoring requirements in order to assess the impact of the project on bird and bat populations, including details on survey locations, parameters to be measured, frequency of surveys and analyses and reporting. The monitoring program shall be capable of detecting any changes to the population of birds and/ or bats that can reasonably be attributed to the operation of the project, that is, data may be required to be collected prior to the commencement of construction;
- (c) incorporate a decision making framework that sets out specific actions and when they may be required to be implemented to reduce any impacts on bird and bat populations that have been identified as a result of the monitoring;
- (d) identify 'at risk' bird and bat groups, seasons (such as wet seasons where bird species may be attracted to nearby wetlands) and/or areas within the project site

- which may attract high levels of mortality and include monthly mortality assessments and periodic local population census' and bird utilisation surveys;
- (e) identify potential mitigation measures and implementation strategies in order to reduce impacts on birds and bats such as minimising the availability of raptor perches, swift carcass removal, pest control including rabbits, use of deterrents, and sector management including switching off turbines that are predicted to or have had an unacceptable impact on bird/bat mortality at certain times; and
- (f) identify matters to be addressed in periodic reports in relation to the outcomes of monitoring, the application of the decision making framework, the mitigation measures identified, progress with the implementation of such measures, and their success.

The Reports referred to under part (f) shall be submitted to the **Secretary** and OEH on an annual basis for the first five years of operation and every two years thereafter (unless otherwise agreed to by the **Secretary**), and shall be prepared within two months of the end of the reporting period. The **Secretary** may, at the request of the Proponent at anytime, vary the reporting requirement or period by notice in writing to the Proponent.

The Proponent is required to implement reasonable and feasible mitigation measures as identified under part (e) where the need for further action is identified through the Bird and Bat Adaptive Management Programme, or as otherwise agreed with the **Secretary**.

Biodiversity Offset Package

- C7. Following final design and prior to the commencement of construction, or as otherwise agreed to by the **Secretary**, the Proponent shall develop and submit a Biodiversity Offset Package for the approval of the **Secretary**. The package shall detail how the ecological values lost as a result of the Project will be offset. The Biodiversity Offset Package shall be developed in consultation with the OEH and shall (unless otherwise agreed by the **Secretary**) include, but not necessarily be limited to:
- (a) the identification of the extent and types of habitat that would be lost or degraded as a result of the final design of the project;
 - (b) the objectives and biodiversity outcomes to be achieved (including 'improve or maintain' biodiversity values), and the adequacy of the proposed offset considered;
 - (c) the final suite of the biodiversity offset measures selected and secured including but not necessarily limited to;
 - (i) an offset proposal which is supported by a suitable metric method (such as the Biobanking Assessment Methodology);
 - (ii) details of the relative condition and values of communities on the offset site in comparison to those to be impacted, including all areas of derived native grassland in moderate to good condition;
 - (iii) proposed management actions and expected gains;
 - (d) the monitoring requirements for compensatory habitat works and other biodiversity offset measures proposed to ensure the outcomes of the package are achieved, including:
 - (i) the monitoring of the condition of species and ecological communities at offset locations;
 - (ii) the methodology for the monitoring program(s), including the number and location of offset monitoring sites, and the sampling frequency at these sites;
 - (iii) provisions for the annual reporting of the monitoring results for a set period of time as determined in consultation with the OEH; and
 - (e) timing and responsibilities for the implementation of the provisions of the Package.

Land offsets shall be consistent with the *Principles for the use of Biodiversity Offsets in NSW* (NSW Office of Environment and Heritage, June 2011). Any land offset shall

be enduring and be secured by a conservation mechanism which protects and manages the land in perpetuity. Where land offsets cannot solely achieve compensation for the loss of habitat, additional measures shall be provided to collectively deliver an improved or maintained biodiversity outcome for the region.

Where monitoring referred to in condition (d) indicates that biodiversity outcomes are not being achieved, remedial actions shall be undertaken to ensure that the objectives of the Biodiversity Offset Package are achieved.

SOIL, WATER QUALITY AND HYDROLOGY

- C8. Except as may be provided by an EPL, the project shall be constructed and operated to comply with section 120 of the *Protection of the Environment Operations Act 1997*, which prohibits the pollution of waters.

Waterways

- C9. Waterway crossings shall be designed and constructed in consultation with NOW and DPI (Fisheries) and consistent with DPI (Fisheries) guidelines, *Policy and Guidelines for Fish Friendly Waterway Crossings* (2004) and *Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (2004).

HAZARDS AND RISK

- C10. Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with:
- (a) all relevant Australian Standards;
 - (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
 - (c) the *Environment Protection Manual for Authorised Officers: Bunding and Spill Management*, technical bulletin (Environment Protection Authority, 1997).

In the event of an inconsistency between the requirements listed in (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

Aviation Obstacles and Hazards

- C11. Prior to the commencement of construction, the Proponent shall consult with:
- (a) aerodrome operators that have an aerodrome located within 30 kilometres of the boundaries of the site, to determine any impact on Obstacle Limitation Surfaces at such aerodromes;
 - (b) AirServices Australia, to determine potential impacts on instrument approach procedures at aerodromes, navigational aids, communications and surveillance facilities; and
 - (c) Aerial Agriculture Association Australia, to determine potential hazards to aerial application and related operations.

Mitigation measures for each of the potential impacts and hazards identified in condition C11 (a) to (c) above, shall be determined in consultation with the respective groups identified in this condition, prior to the commencement of construction.

- C12. Prior to the commencement of construction and operation, the Proponent shall provide the following information to the Civil Aviation Safety Authority, Airservices Australia, Royal Australian Air Force - Aeronautical Information Services, as well as all known users of privately owned local airfields:
- (a) "as constructed" coordinates in latitude and longitude of each wind turbine generator;
 - (b) final height of each wind turbine generator in Australian Height Datum; and
 - (c) ground level at the base of each wind turbine generator in Australian Height Datum.

C13. Should increases to the costs of aerial agricultural spraying on any non-associated property surrounding the site be attributable to the operation of the project, the Proponent shall fully fund to the affected landowner, the reasonable cost difference between pre-construction aerial agricultural spraying and the increased cost, as agreed between the relevant parties.

Bushfire Risk

C14. The Proponent shall ensure that all project components on site are designed, constructed and operated to minimise ignition risks, provide for asset protection consistent with relevant RFS design guidelines (*Planning for Bushfire Protection 2006 and Standards for Asset Protection*) and provide for necessary emergency management including appropriate fire-fighting equipment and water supplies on site to respond to a bush fire.

C15. Throughout the operational life of the project, the Proponent shall regularly consult with the local RFS about details of the project, including the construction timetable and the final location of all infrastructure on the site. The Proponent shall comply with any reasonable request of the local RFS to reduce the risk of bushfire and to enable fast access in emergencies.

Telecommunications

C16. If the project results in the disruption to radio or telecommunications services in the area, then the Proponent shall make good any disruption to these services as soon as practicable following the disruption.

If there is a dispute about the mitigation measures to be implemented or the implementation of these mitigation measures, then either party may refer the matter to the Secretary for resolution.

NOISE

Overhead Transmission Line

C17. Any overhead transmission line associated with the project shall be designed, constructed and operated to minimise the generation of corona and aeolian noise as far as reasonable and feasible at the nearest existing **non-associated residences**.

WASTE MANAGEMENT

Waste Generation and Management

C18. The Proponent shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.

C19. The Proponent shall maximise the reuse and/or recycling of waste materials generated on site, to minimise the need for treatment or disposal of those materials outside the site.

C20. The Proponent shall ensure that all liquid and/or non-liquid waste generated on the site is assessed and classified in accordance with *Waste Classification Guidelines (DECC, 2008)*, or any future guideline that may supersede that document and where removed from the site is only directed to a waste management facility lawfully permitted to accept the materials.

C21. The Proponent shall ensure that no green waste is burnt on site during the life of the project.

UTILITIES AND SERVICES

C22. Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the project shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Proponent.

VISUAL AMENITY

Views

C23. All residents, business owners or public authorities, whose dwelling, business or public area respectively, may be subject to moderate to high visual impact, as defined in the EA, shall be consulted regarding impact minimisation measures. The outcomes of this consultation process shall be used to inform the Design and Landscape Plan, required under condition C30.

C24. At the request of any owners of residential dwellings or businesses with views of a turbine(s) located within five kilometres of their dwellings, the Proponent shall provide and bear the full cost of reasonable landscaping treatments to visually screen these dwellings. Such a request may be made in writing by the owner of the dwelling or business within 6 months from the commencement of operation of the **project**, and landscaping treatments agreed between the parties shall be implemented and completed within 12 months of such an agreement. Should the parties not be able to reach agreement on the scope of landscaping treatments, then either party may refer the matter to the **Secretary** for resolution. The **Secretary's** decision on such a referral shall be final and binding on the parties

Turbine and Associated Infrastructure External Design

C25. Deleted

C26. Deleted

Shadow Flicker

C27. Shadow flicker from the project must not exceed 30 hours/annum at any residence not associated with the project.

Visual Appearance

C28. The Proponent must:

- (a) minimise the off-site visual impacts of the project;
- (b) ensure the wind turbines are:
 - painted off white/grey, unless otherwise agreed by the Secretary; and
 - finished with a surface treatment that minimises the potential for glare and reflection;
- (c) ensure the visual appearance of all ancillary infrastructure (including paint colours), blends in as far as possible with the surrounding landscape; and
- (d) not mount any advertising signs or logos on wind turbines or ancillary infrastructure.

Night Lighting

C29. With the exception of aviation hazard lighting implemented in accordance with the requirements of this condition, no external lighting other than low intensity security night lighting is permitted on site unless otherwise agreed or directed by the **Secretary**, or required by Civil Aviation Safety Authority.

Prior to the commencement of construction, the **Proponent** shall consult with the Civil Aviation Safety Authority on the need for aviation hazard lighting in relation to the wind turbines. Any aviation hazard lighting shall be implemented in a manner that minimises visual intrusion to surrounding **non-associated residences** as far as reasonable and feasible.

Design and Landscaping

C30. A Design and Landscaping Plan shall be prepared to outline measures to ensure appropriate development and maintenance of landscaping on the site to achieve adequate landscape buffers and address the visual impacts arising from the project, including turbines, site access roads and associated above ground infrastructure, as far as is reasonable and feasible.

The Plan shall be prepared by a qualified landscape architect and where relevant meet any requirements of the Councils. The Plan shall include design treatments for the turbines and ancillary infrastructure, including, but not necessarily limited to:

- (a) the landscape screening measures at residences in close proximity to the project site and along nearby roadsides to screen potential moderate to significant views of the project, including an outline of additional measures available for requested landscaping treatments, as permitted under condition C24;
- (b) landscape elements and built elements, including proposed treatments, finishes and materials of exposed surfaces (including colour specifications);
- (c) lighting;
- (d) a schedule of species to be used in landscaping;
- (e) details of the timing and progressive implementation of landscape works; and
- (f) procedures and methods to monitor and maintain landscaped areas.

The Plan shall be submitted for the approval of the **Secretary** prior to the commencement of permanent built works and/ or landscaping, unless otherwise agreed by the **Secretary**. The Plan may be submitted in stages to suit the staged construction program of the project.

PROPERTY IMPACTS

Crown Land

C31. Prior to the commencement of construction of the project, the Proponent shall, with the agreement of Council, assume full maintenance responsibility for any Crown road reserves associated with the project which are identified as requiring dedication to Council during the life of the project. The Proponent shall retain full maintenance responsibility for any such road(s) for the duration of their dedication to Council during the life of the project.

C32. Prior to the commencement of construction of the project, the Proponent shall consult with and comply with the requirements of the Department of Lands in relation to any Crown land affected by the project to enable the lawful use of that land by the project.

Trigonometric Reserves

C33. Disturbance to Trigonometric Reserves shall be avoided during the life of the project, unless otherwise approved by the Surveyor General and the relevant licence under the *Crown Lands Act 1989* is obtained by the Proponent.

Mineral Resources

C34. Prior to the commencement of relevant construction works, the Proponent shall consult with the Department of **Planning and Environment – Division of Resources and Geoscience**, and holders of mineral, mining and exploration titles or tenements, with respect to measures to be applied during construction and operation of the project so as to minimise the potential for any sterilisation of resources on the tenement.

SCHEDULE D COMMUNITY INFORMATION REPORTING AND AUDITING

COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

Community Consultative Committee

- D1. From the commencement of construction, the Proponent must operate a Community Consultative Committee for the project to the satisfaction of the Secretary, in accordance with the *Community Consultative Committee Guidelines for State Significant Projects* (2016), or its latest version.

Complaints and Enquiries Procedure

- D2. Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall ensure that the following are available for community enquiries and complaints for the life of the project (including construction and operation) or as otherwise agreed by the Secretary:
- (a) a 24 hour telephone number(s) on which complaints and enquiries about the project may be registered;
 - (b) a postal address to which written complaints and enquires may be sent;
 - (c) an email address to which electronic complaints and enquiries may be transmitted; and
 - (d) a complaints management and mediation system for complaints unable to be resolved.

The telephone number, the postal and email addresses shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval.

- D3. Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement a **Complaints Management System** consistent with AS 4269: *Complaints Handling* and maintain the System for the duration of construction and for the life of the project.

Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the compliance reports required by this approval. The information contained within the System shall be made available to the Secretary on request.

Provision of Electronic Information

- D4. Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the project, for the life of the project. The Proponent shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to:
- (a) information on the current implementation status of the project;
 - (b) a copy of the documents referred to under condition B1 of this approval, and any documentation supporting modifications to this approval that may be granted from time to time;
 - (c) a copy of this approval and any future modification to this approval;
 - (d) a copy of each relevant environmental approval/consent, licence or permit required and obtained in relation to the project;

- (e) a copy of each current strategy, plan, program or other document required under this approval;
- (f) the outcomes of compliance tracking in accordance with condition D5 of this approval; and
- (g) details of contact point(s) to which community complaints and inquiries may be directed, including a telephone number, postal and email addresses.

Revision of Strategies, Plans and Programs

D4A. Within 3 months of the submission of:

- (a) the submission of an incident report under condition D6 below;
- (b) the submission of an audit under condition D8 below; or
- (c) any modification to the conditions of this approval (unless the conditions require otherwise),

the Proponent shall review and, if necessary, revise the strategies, plans, and programs required under this approval to the satisfaction of the Secretary.

Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted to the Secretary for approval.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

COMPLIANCE MONITORING AND TRACKING

Compliance Tracking Program

D5. The Proponent shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The Program shall be submitted to the Secretary for approval prior to the commencement of construction and operate for the life of the project. The Program shall include, but not necessarily be limited to:

- (a) provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the project (including prior to each stage, where works are being staged);
- (b) provisions for periodic review of the compliance status of the project against the requirements of this approval;
- (c) provisions for periodic reporting of compliance status to the Secretary, including a Pre-Construction Compliance Report, during construction reporting, and a Pre-Operation Compliance Report;
- (d) a program for independent environmental auditing in accordance with ISO 19011:2003 - Guidelines for Quality and/ or Environmental Management Systems Auditing;
- (e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;
- (f) provisions for reporting environmental incidents to the Secretary and relevant public authorities during construction;
- (g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and
- (h) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

Incident Reporting

D6. The Proponent shall notify the Secretary within 24 hours of becoming aware of any incident with actual or potential significant off-site impacts on people or the biophysical

environment. Further, the Proponent shall provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred.

- D7. The Proponent shall meet the requirements of the **Secretary** to address the cause(s) or impacts of any incident, as they relate to this approval, reported in accordance with condition D6 of this approval, within such period as the Secretary may require.

OPERATIONAL PERFORMANCE

Operation Performance Audit Report

- D8. Within fifteen months of the completion of construction, and at any other time required by the **Secretary**, the Proponent shall commission an independent qualified person or team to undertake an Operational Performance Audit of the project. The independent person or team shall be approved by the **Secretary** prior to the commencement of the Audit. The Operational Performance Audit Report shall be submitted to the **Secretary** within one month of the completion of the Audit, unless otherwise agreed by the Secretary. The Audit shall:
- (a) Assess compliance with the requirements of this approval, and other licences and approvals that apply to the project;
 - (b) assess the operational performance of the project against the aims and objectives for the project specified in the documents referred to under condition **B1** of this approval;
 - (c) assess the environmental performance of the project against the predictions made and conclusions drawn in the documents referred to under condition **B1** of this approval; and
 - (d) review the effectiveness of the environmental management of the project, including any environmental impact mitigation works.
-

SCHEDULE E CONSTRUCTION ENVIRONMENTAL MANAGEMENT

AIR QUALITY

Dust Generation

- E1. The Proponent shall construct and operate the project in a manner that minimises dust generation from the site, including wind-blown and traffic-generated dust as far as practicable. All project related activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should visible dust emissions attributable to the project occur during construction and operation, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.

HERITAGE

- E2. In undertaking the project, impacts to heritage, shall to the greatest extent practicable, be avoided and minimised. Where impacts are unavoidable, works shall be undertaken in accordance with the strategy outlined in the Construction Heritage Management Plan required by condition E22.
- E3. If during the course of construction the Proponent becomes aware of any previously unidentified heritage object(s), all work likely to affect the object(s) shall cease immediately and the Heritage Council of New South Wales shall be notified immediately in accordance with section 146 of the NSW Heritage Act 1977. Relevant works shall not recommence until written authorisation from the OEH advising otherwise is received by the Proponent.
- E4. If during the course of construction the Proponent becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the OEH informed in accordance with section 89A of the National Parks and Wildlife Act 1974. Relevant works shall not recommence until written authorisation from the OEH advising otherwise is received by the Proponent.

NOISE AND VIBRATION

Construction or Decommissioning Hours

- E5. The Proponent shall only undertake construction or decommissioning activities between:
- (a) 7:00am to 6:00pm Mondays to Fridays;
 - (b) 8:00am to 1:00pm Saturdays; and
 - (c) at no time on Sundays or NSW public holidays.

The following construction activities may be undertaken outside these hours:

- activities that are inaudible at any non-associated residence;
- activities approved under an out-of-hours (OOHW) work protocol (see condition E22(b)(vi));
- the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
- emergency work to avoid the loss of lives, property and/or prevent environmental harm.

- E6. Deleted.

E7. Deleted.

Construction Noise and Vibration

E8. Deleted.

E9. The Proponent shall only carry out blasting on site between 9am and 5pm Monday to Friday and 9am to 1pm Saturday. No blasting is allowed on Sundays or NSW public holidays.

E10. The Proponent shall ensure that any blasting carried out during construction of the project does not exceed the criteria in Table 1.

Table 1 - Blasting criteria

<i>Location</i>	<i>Airblast overpressure (dB(Lin Peak))</i>	<i>Ground vibration (mm/s)</i>	<i>Allowable exceedance</i>
Residence on privately-owned land	120	10	0%
	115	5	5% of the total number of blasts or events over a period of 12 months

E11. Deleted.

E12. Deleted.

PROPERTY IMPACTS

E13. Access to property shall be maintained during construction unless otherwise agreed in advance with the affected property owner. Access that is physically affected by the project shall be reinstated by the Proponent to at least an equivalent standard, in consultation with the affected property owner.

E14. Any damage caused to property as a result of the project shall be rectified or the property owner compensated, within a reasonable timeframe, with the costs borne by the Proponent.

SOIL, WATER QUALITY AND HYDROLOGY

Construction Soil and Water Management

E15. Soil and water management measures consistent with *Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition* (Landcom, 2004) shall be employed during the construction of the project to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.

E16. Where available, and of appropriate chemical and biological quality, stormwater, recycled water or other water sources shall be used in preference to potable water for construction activities, including concrete mixing and dust control.

TRANSPORT AND ACCESS

Road Dilapidation

E17. Unless otherwise agreed by the **Secretary**, the Proponent shall commission an independent, qualified person or team to undertake the following in consultation with the relevant road authority:

- (a) prior to the commencement of construction, review the proposed route and existing access provisions to the Wind Farm Site to determine whether the route and existing provisions allow for safe access of construction and operational vehicles associated with the project (including appropriate site distances and provisions for over-mass or over-dimensional transport and safety with other road users). Where improvements or changes to the proposed route are required, the Proponent shall implement these in consultation with the relevant road authority, prior to the commencement of construction and at the full expense of the Proponent;
- (b) assess all roads proposed to be used for over-mass and/ or over-dimensional transport (including intersections, bridges, culverts and other road features) prior to the commencement of construction to determine whether the existing road condition can accommodate the proposed over-mass and/ or over-dimensional haulage. Where improvements are required, the Proponent shall implement these in consultation with the relevant road authority, prior to the commencement of **over-mass and/ or over-dimensional transport** and at the full expense of the Proponent; and
- (c) upon determining the haulage route(s) for construction vehicles associated with the project, and prior to construction, an independent and qualified person or team shall undertake a **Road Dilapidation Report**. The report shall assess the current condition of the road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the project. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage.

Following completion of construction, a subsequent report shall be prepared to assess any damage that may have resulted from the construction of the project.

Measures undertaken to restore or reinstate roads affected by the project shall be undertaken in a timely manner, in accordance with the reasonable requirements of the relevant road authority, and at the full expense of the Proponent.

Road Upgrades

E17A. Prior to the commencement of construction of the alternative transmission line (including associated substation and ancillary infrastructure), unless otherwise agreed with the **Secretary**, the Proponent shall:

- (a) upgrade the intersection of the Gwydir Highway and Spring Mountain Road to provide an Austroads Basic Right Turn (BAR) treatment and Austroads Basic Left Turn (BAL) treatment to the satisfaction of RMS and in accordance with current Austroads Guidelines, Australian Standards and RMS supplements;
- (b) upgrade the substation access point to a Typical Rural Property Access standard to the satisfaction of RMS and the relevant Councils; and
- (c) implement any upgrades at the primary access point that are identified in accordance with condition E22 (d) to the satisfaction of the relevant roads authorities.

ANCILLARY FACILITIES

E18. Unless otherwise approved by the **Secretary**, the location of ancillary facilities associated with the construction of the project shall:

- (a) be located more than 50 metres from a waterway;
- (b) be located within or adjacent to the project;
- (c) have ready access to the road network;
- (d) be located to minimise the need for heavy vehicles to travel through residential areas;
- (e) be sited on relatively level land;
- (f) be separated from nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant);
- (g) not require vegetation clearing beyond that already required by the project;
- (h) not impact on heritage sites (including areas of archaeological sensitivity) beyond those already approved to be impacted by the project;
- (i) not unreasonably affect the land use of adjacent properties;
- (j) be above the 20 year ARI flood level unless a contingency plan to manage flooding is prepared and implemented; and
- (k) provide sufficient area for the storage of raw materials to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours.

The location of the ancillary facilities shall be identified in the Construction Environmental Management Plan required under condition E21 and include consideration of the above criteria. Where any of the above criteria cannot be met for any proposed ancillary facility, the Proponent shall demonstrate to the satisfaction of the **Secretary** that there will be no significant adverse impact from the facility's construction or operation. Such assessment(s) can be submitted separately or as part of the Construction Environmental Management Plan.

E19. All construction ancillary facility sites shall be rehabilitated to at least their pre-construction condition, unless otherwise agreed by the affected landowner.

ENVIRONMENTAL REPRESENTATIVE

E20. Prior to the commencement of construction of the project, or as otherwise agreed by the Director-General, the Proponent shall nominate for the approval of the Director-General a suitably qualified and experienced Environmental Representative(s) that is independent of the design, construction and operational personnel. The Proponent shall employ the Environmental Representative(s) for the duration of construction and operation, or as otherwise agreed by the **Secretary**. The Environmental Representative(s) shall:

- (a) be the principal point of advice in relation to the environmental performance of the project;
- (b) monitor the implementation of environmental management plans and monitoring programs required under this approval and advise the Proponent upon the achievement of these plans/ programs;
- (c) have responsibility for considering and advising the Proponent on matters specified in the conditions of this approval, and other licences and consents related to the environmental performance and impacts of the project;
- (d) ensure that environmental auditing is undertaken in accordance with the project's Environmental Management System(s);
- (e) be given the authority to approve/ reject minor amendments to the Construction Environmental Management Plan. What constitutes a "minor" amendment shall

- be clearly explained in the Construction Environmental Management Plan required under condition E21;
- (f) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions cease immediately should an adverse impact on the environment be likely to occur; and
- (g) be consulted in responding to the community concerning the environmental performance of the project where the resolution of points of conflict between the Proponent and the community is required.

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- E21. Prior to the commencement of construction, or as otherwise agreed by the Director-General, the Proponent shall prepare and implement (following approval) a **Construction Environmental Management Plan** for the project. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:
- (a) a description of activities to be undertaken during construction of the project (including staging and scheduling);
 - (b) statutory and other obligations the Proponent is required to fulfil during construction, including approval/consents, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
 - (c) a description of the roles and responsibilities for relevant employees involved in the construction of the project, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval;
 - (d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase; and
 - (e) details of how environmental performance will be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the project). In particular, the following environmental performance issues shall be addressed in the Plan:
 - (i) compounds and ancillary facilities management;
 - (ii) noise and vibration;
 - (iii) traffic and access;
 - (iv) soil and water quality and spoil management;
 - (v) air quality and dust management;
 - (vi) management of Aboriginal and non-Aboriginal heritage;
 - (vii) soil contamination, hazardous material and waste management;
 - (viii) management of ecological impacts; and
 - (ix) hazard and risk management, including bushfire risk.

The Plan shall be submitted for the approval of the **Secretary** no later than one month prior to the commencement of construction, or as otherwise agreed by the **Secretary**. The Plan may be prepared in stages, however, construction works shall not commence until written approval has been received from the **Secretary**.

Note: The approval of a Construction Environmental Management Plan does not relieve the Proponent of any other requirement associated with this project approval. If there is an inconsistency with an approved Construction

E22. As part of the Construction Environmental Management Plan for the project required under condition E21 the Proponent shall prepare and implement:

- (a) a **Construction Compound and Ancillary Facilities Management Plan** to detail the management of site compounds associated with the project. The Plan shall include but not necessarily be limited to:
 - (i) a description of the facility, its components and the surrounding environment;
 - (ii) details of the activities to be carried out at each facility, including the hours of use and the storage of dangerous and hazardous goods;
 - (iii) details of the mitigation and management procedures specific to the facility that would be implemented to minimise environmental and amenity impacts and an assessment of the adequacy of the mitigation or offsetting measures;
 - (iv) identification of the timing for the completion of activities at the facility and how the site will be decommissioned (including any necessary rehabilitation); and
 - (v) appropriate monitoring, review and amendment mechanisms.
- (b) a **Construction Noise and Vibration Management Plan** to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be consistent with the guidelines contained in the *Interim Construction Noise Guidelines* (DECC, 2009) and shall include, but not necessarily be limited to:
 - (i) identification of sensitive receivers and relevant construction noise and vibration goals applicable to the project;
 - (ii) details of construction activities and an indicative schedule for construction works; including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios, including at ancillary facilities) that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas;
 - (iii) identification of reasonable and feasible measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts);
 - (iv) procedures and mitigation measures to ensure relevant vibration and blasting criteria are achieved, including a suitable blast management program, applicable buffer distances for vibration intensive works, use of low-vibration generating equipment/ vibration dampeners or alternative construction methodology, and pre- and post- construction dilapidation surveys of sensitive structures where blasting and/ or vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria); and
 - (v) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported, and, if any exceedance is detected, how any non-compliance would be rectified;
 - (vi) an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction **and decommissioning** hours as defined in condition E5 , including a risk assessment process under which an Environmental Representative may approve out-of-hour construction activities deemed to be of low environmental risk and refer high

- risk works for the **Secretary's** approval. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, and detail a standard protocol for referring applications to the **Secretary**; and
- (vii) mechanisms for the monitoring, review and amendment of this plan.
- (c) a **Construction Traffic and Access Management Plan** to manage construction traffic and access impacts of the project. The plan shall be developed in consultation with the relevant road authority and shall include, but not necessarily be limited:
- (i) identification of construction traffic routes and construction traffic volumes (including heavy vehicle/ spoil haulage) on these routes;
 - (ii) details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points;
 - (iii) identification of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, property access, including details of oversize load movements;
 - (iv) details of management measures to minimise traffic impacts, including temporary road work traffic control measures, onsite vehicle queuing and parking areas and management measures to minimise peak time congestion and measures to ensure safe pedestrian and cycle access;
 - (v) a response plan which sets out a proposed response to any traffic, construction or other incident; and
 - (vi) mechanisms for the monitoring, review and amendment of this plan
- (d) Prior to commencing construction of the alternative transmission line (including associated substation and ancillary infrastructure), unless otherwise agreed with the Secretary, the Proponent must update the **Construction Traffic and Access Management Plan** required under condition E22 (c) to address traffic and access arrangements associated with the construction of the alternative transmission line and associated infrastructure at the primary access point for the project. The updates to the plan must be prepared by a suitably qualified person whose appointment has been endorsed by RMS, in consultation with the RMS and relevant Councils, and to the satisfaction of the Secretary. The updates to the plan must include:
- (i) a detailed analysis of volumes and distribution of construction traffic;
 - (ii) a protocol for assessing road safety and intersection performance, and determining whether any additional upgrades are required to maintain safety of turning vehicles; and
 - (iii) identification of any necessary road upgrades, and detailed arrangements for implementation.
- (e) a **Construction Soil and Water Quality Management Plan** to manage surface and groundwater impacts during construction of the project. The plan shall be developed in consultation with NOW and include, but not necessarily be limited to:
- (i) details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater;
 - (ii) surface water and ground water impact assessment criteria consistent with Australian and New Zealand Environment Conservation Council (ANZECC) guidelines;
 - (iii) management measures to be used to minimise surface and groundwater impacts, including details of how spoil and fill material required by the project

will be sourced, handled, stockpiled, reused and managed; erosion and sediment control measures; and the consideration of flood events;

- (iv) management measures for contaminated material and a contingency plan to be implemented in the case of unanticipated discovery of contaminated material during construction;
- (v) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance of the criteria is detected how any non-compliance can be rectified; and
- (vi) mechanisms for the monitoring, review and amendment of this plan.

(f) a **Construction Heritage Management Plan** to detail how construction impacts on Aboriginal and Historic heritage will be minimised and managed. The sub-plan shall be developed in consultation with the OEH and registered Aboriginal stakeholders (for Aboriginal heritage), and include, but not necessarily be limited to:

- (i) In relation to Aboriginal Heritage:
 - (a) details of further investigation and identification of Aboriginal cultural heritage sites within the project area;
 - (b) details of management measures to be carried out in relation to Aboriginal heritage, including a detailed methodology and strategies for protection, monitoring, salvage, and conservation, of sites and items associated with the project;
 - (c) procedures for dealing with previously unidentified Aboriginal objects (excluding human remains) including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified archaeologist in consultation with the Department, the OEH and registered Aboriginal stakeholders and assessment of the consistency of any new Aboriginal heritage impacts against the approved impacts of the project, and registering of the new site in the OEH's Aboriginal Heritage Information Management System (AHIMS) register;
 - (d) procedures for dealing with human remains, including cessation of works in the vicinity and notification of the Department, NSW Police Force, the OEH and registered Aboriginal stakeholders and not recommencing any works in the area unless authorised by the OEH and/ or the NSW Police Force;
 - (e) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this approval and *National Parks and Wildlife Act 1974* (where relevant) including site identification, protection and conservation of Aboriginal cultural heritage; and
 - (f) procedures for ongoing Aboriginal consultation and involvement for the duration of the project; and
- (ii) In relation to Historic Heritage:
 - (a) identification of heritage items directly and indirectly affected by the project;
 - (b) details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and/ or measures to protect unaffected sites during construction works in the vicinity);
 - (c) details of monitoring and reporting requirements for impacts on heritage items;

- (d) procedures for dealing with previously unidentified heritage objects, (including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified and experienced archaeologist in consultation with the OEH and the Department, and assessment of the consistency of any new heritage impacts against the approved impacts of the project; and
- (e) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions and obligations under the *Heritage Act 1977*) including site identification, protection and conservation of non-Aboriginal cultural heritage; and
- (iii) mechanisms for the monitoring, review and amendment of this plan.

(g) a **Construction Flora and Fauna Management Plan** to detail how construction impacts on ecology will be minimised and managed. The Plan shall be developed in consultation with the OEH and shall include, but not necessarily be limited to:

- (i) plans for impacted and adjoining areas showing vegetation communities; important flora and fauna habitat areas (including identified Rough-barked Angophora tree/s containing multiple hollows); locations where threatened species, populations or ecological communities have been recorded; including pre-clearing surveys by a suitably qualified ecologist to confirm the location of threatened flora (including Blackbutt Candlebark species) and fauna species and associated habitat features;
- (ii) the identification of areas to be cleared and details of management measures (such as fencing and establishment of buffer zones, clearing procedures, removal and relocation of fauna during clearing, habitat tree management and construction worker education) to avoid any residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat;
- (iii) rehabilitation details, including identification of flora species and sources, the reuse of cleared flora, and measures for the management and maintenance of rehabilitated areas;
- (iv) weed management measures focusing on early identification of invasive weeds and effective management controls;
- (v) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance of the criteria is detected how any non-compliance can be rectified;
- (vi) a procedure for dealing with unexpected EECs/threatened species identified during construction, including cessation of work and notification of the OEH, determination of appropriate mitigation measures in consultation with the OEH (including relevant re-location measures) and updating of ecological monitoring and/ or biodiversity offset requirements; and
- (vii) mechanisms for the monitoring, review and amendment of this plan.

SCHEDULE F OPERATIONAL ENVIRONMENTAL MANAGEMENT

HAZARD AND RISK

Safety Management System

- F1. At least two months prior to the commencement of commissioning, the Proponent shall prepare a report outlining a comprehensive Safety Management System, covering all on-site systems relevant to ensuring the safe operation of the project. The report shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept at the site and shall be available for inspection by the Department upon request. The Safety Management System shall be developed in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management', and should include:
- (a) procedures and programs for the maintenance and testing of the safety related equipment to ensure its integrity over the life of the project; and
 - (b) an outline of a documented procedure for the management of change.

Television and Radio Interference

- F2. Prior to the commencement of commissioning of the project, the Proponent shall undertake an assessment of the existing quality of the television/radio transmission available at a representative sample of receivers located within 5 kilometres of any wind turbine.
- F3. In the event of a complaint from a receptor located within 5 kilometres of a wind turbine regarding television/radio transmission during the operation of the project, the Proponent shall investigate the quality of transmission at the receptor compared with the pre-commissioning assessment and where any transmission problems can be reasonably attributable to the project, rectify the problems within three months of the receipt of the complaint, through the implementation of measures including:
- (a) modification to or replacement of receiving antenna;
 - (b) installation and maintenance of a parasitic antenna system;
 - (c) provision of a land line between the affected receptor and an antenna located in an area of favourable reception; and/or
 - (d) other feasible measures.

If interference cannot be overcome by the measures outlined in (a) to (d), the Proponent shall negotiate with the impacted landowner(s) about installing and maintaining a satellite receiving antenna. The Proponent shall be responsible for all costs associated with any such mitigation measures.

ECOLOGY

Rehabilitation and Revegetation

- F4. Disturbance to watercourses and/or associated riparian vegetation shall be rehabilitated to a standard equal to or better than the existing condition in consultation with the NOW and DPI (Fisheries) within six months of the cessation of construction activities at the relevant area. Any revegetation measures undertaken shall be monitored and maintained by the Proponent consistent with the requirements of condition F5.
- F5. The Proponent shall implement a revegetation and rehabilitation programme for all areas of the project footprint which are disturbed during the construction of the project

and which are not required for the ongoing operation of the project, including temporary construction facility sites and sections of construction access roads. The Proponent shall ensure that all revegetation measures are implemented progressively where possible and in all cases within six months of the cessation of construction activities at the relevant area. Unless otherwise agreed to by the Secretary, the Proponent shall monitor and maintain the health of all revegetated areas until such time that the plantings have been verified by an independent and suitably qualified expert (whose appointment has been agreed to by the Secretary) as being well established, in good health and self sustaining.

NOISE

Background Noise Survey and Verification Report

F6. Prior to commissioning of the wind farm, the Proponent shall provide an updated determination of background noise levels at representative non-associated residence locations and calculate the appropriate noise criteria according to condition F7. The report should also predict the wind farm noise levels at all non-associated residences or representative clusters of non-associated residences that will experience wind turbine noise greater than 35 dB(A) when turbines are operating at rated power. The report is to be prepared in consultation with the EPA and should meet the requirements set out in Appendix 2.

Operational Noise Criteria – Wind Turbines

F7. The Proponent shall ensure that the noise generated by the operation of wind turbines does not exceed the greater of :

- (a) 35 dB(A); or
- (b) the existing background noise level for each integer wind speed from cut-in speed to the rated power of the wind turbine generators, by more than 5 dB(A).

Unless otherwise replaced by an equivalent NSW wind farm noise guideline, noise generated by the project is to be measured in accordance with the relevant requirements of Sections 3.1 and 3.2 of the South Australian Environment Protection Authority's *Wind Farms Environmental Noise Guidelines 2009*, as modified by the provisions in Appendix 3.

However, these criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

Operational Noise Criteria – Ancillary Infrastructure

F8. The Proponent shall ensure that the noise generated by the operation of ancillary infrastructure does not exceed 35 dB(A) $L_{Aeq}(15 \text{ minute})$ at any non-associated residence.

Noise generated by the project is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (as may be updated from time-to-time), as modified by the provision in Appendix 3.

However, these criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

Operating Conditions

F9. The Proponent shall:

- (a) implement best management practice to minimise the construction, operational, decommissioning and road traffic noise and vibration of the project;

- (b) implement sector management of wind turbines to manage any wind directions or meteorological conditions that are found to result in exceedances of the noise criteria in condition F7;
- (c) undertake noise monitoring within 3 months of the commissioning of the wind farm, or other timing as may be agreed by the Secretary, to determine whether the project is complying with the relevant conditions of this approval; and
- (d) carry out further noise monitoring if required by the Secretary, to the satisfaction of the Secretary.

F10.-F.18. Deleted.

OPERATIONAL ENVIRONMENTAL MANAGEMENT

F19. Prior to the commencement of operation, or as otherwise agreed by the **Secretary**, the Proponent shall prepare and implement (following approval) an **Operation Environmental Management Plan** for the project. The Plan shall outline the environmental management practices and procedures that are to be followed during operation, and shall be prepared in consultation with relevant agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:

- (a) a description of activities to be undertaken during operation of the project (including staging and scheduling);
- (b) statutory and other obligations that the Proponent is required to fulfil during operation, including approval/consents, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
- (c) overall environmental policies, guidelines and principles to be applied to the operation of the project;
- (d) a description of the roles and responsibilities for relevant employees involved in the operation of the project, including relevant training and induction provisions for ensuring that employees are aware of their environmental and compliance obligations under these conditions of approval;
- (e) an environmental risk analysis to identify the key environmental performance issues associated with the operation phase;
- (f) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts, including those safeguards and mitigation measures detailed in the EA (and any impacts arising from the staging of the construction of the project); and
- (g) details of how sector management would be used to ensure that operational noise criteria are not exceeded.

The Plan shall be submitted for the approval of the **Secretary** no later than one month prior to the commencement of operation, or as otherwise agreed by the **Secretary**. Operation shall not commence until written approval has been received from the Secretary. Upon receipt of the **Secretary's** approval, the Proponent shall make the Plan publicly available as soon as practicable.

Note: The approval of an Operation Environmental Management Plan does not relieve the Proponent of any other requirement associated with this project approval. If there is an inconsistency with an approved Operation Environmental Management Plan and the conditions of this project approval, the requirements of this project approval prevail.

F20. Deleted.

SCHEDULE G ADDITIONAL PROCEDURES

Land Acquisition and Criteria

- G1. Should the Proponent determine to proceed with any or all of the turbines listed in Table 2, the Proponent shall notify in writing the owner of the property listed in the corresponding row of the Table that it intends to proceed and that it is initiating the acquisition process.

Table 2 – Turbines to be deleted or landholdings to be acquired

Turbines to be deleted	or	Property to be acquired	Relevant Lot and DP numbers
Turbines 32 & 33		"Tangari"	Lot 154 DP753260

- G2. At the request in writing of the owner(s) of any of the lots notified under condition G1, if such a request is made within three months of the date of service of the notification required under condition G1 and provided that this approval has not lapsed or been surrendered within that time, the Proponent shall proceed to acquire the relevant landholdings referred to under this condition.
- G3. Within three months of receiving a written request from a landowner with acquisition rights under condition G2 of this approval, the Proponent shall make a binding written offer to the landowner to purchase the land specified in the request, with such offer to remain open for a period of three months after receipt and shall not be reduced, based on:
- (a) the current market value of the landowner's interest in the land at the date of the written request, as if the land was unaffected by the project, having regard to the:
 - (i) existing and permissible use(s) of the land, in accordance with applicable planning instruments at the date of the written request;
 - (ii) presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date;
 - (b) reasonable costs associated with obtaining legal and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
 - (c) reasonable compensation for any disturbance caused by the land acquisition process.

If, after three months of receipt of the Proponent's offer above, the Proponent and landowner cannot agree on the acquisition price of the land, including costs and compensation under (b) and (c) above, and/or the terms upon which the property is to be acquired, then either party may refer the matter to the **Secretary** for resolution.

Upon receiving such a request, the **Secretary** shall request the President of the New South Wales Division of the Australian Property Institute to appoint a suitably qualified and experienced independent valuer, being a Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, including the reasonable compensation for disturbance caused by the land acquisition process associated with (c) above, and/or the terms upon which the property is to be acquired. This process is to be completed within three months of the **Secretary** receiving any such request.

Within 14 days of receiving the independent valuer's determination, the Proponent shall make a binding written offer to the landowner (including reasonable costs and

compensation under (b) and (c) above). The offer, to purchase the property at a price not less than the independent valuer's determination and otherwise on the terms specified in that determination shall remain open for a period of three months after receipt by the landowner and shall not be reduced.

If the landowner refuses to accept the offer within three months of the date of the Proponent's offer, the Proponent's obligations to acquire the land concerned shall cease.

If the landowner accepts either of the offers above and thereafter the Proponent fails to acquire the land on terms consistent with the relevant offer within three months of acceptance, the relevant turbines are to be deleted.

- G4. The Proponent shall bear the reasonable costs of any valuation or survey assessment requested by the independent valuer or the **Secretary** and the costs of determination referred to under condition G3.
- G5. If the Proponent and landowner agree that only part of the landowner's property shall be acquired, the Proponent shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan with the Office of the Registrar-General.
- G6. If the Proponent has not initiated the acquisition process referred to in condition G1 for any Lot specified in any request under condition G2 by 4 years from the date of this approval or prior to the commencement of any construction activities in the relevant sector of the project, whichever occurs earliest, the relevant nominated turbine(s) relating to that Lot identified in condition G1 are to be deleted from the project.
- G7. If the Proponent has initiated the acquisition process referred to in condition G1 by the earlier of the dates determined in accordance with condition G6 and the owners of the relevant Lot to be acquired notify the Proponent in writing that they do not consent to their Lot being acquired, or fail to provide a written request to the Proponent for all or part of their land to be acquired in accordance with condition G2, then the requirement either to acquire that land under condition G2 or to delete the nominated relevantly applicable turbine from the project under condition G6 lapses.

DECOMMISSIONING

- G8. Within 18 months of the cessation of operation of the project, **unless the Secretary agrees otherwise**, the site shall be decommissioned and returned by the Proponent, as far as practicable, to its condition prior to the commencement, in consultation with the relevant landowner(s) and to the satisfaction of the **Secretary** (and in accordance with the Decommissioning and Rehabilitation Plan required under condition G10).

All generating facilities and associated infrastructure (including but not necessarily limited to the White Rock substation and transformers, switchyard, operation and maintenance facility, overhead transmission lines and access roads) shall be removed from the site unless otherwise agreed by the **Secretary**. Project related infrastructure (including access roads) may only be retained on site, where the Proponent has demonstrated to the satisfaction of the **Secretary** prior to the commencement of decommissioning, that these components: are permissible under the site's statutory landuse provisions in force upon commencement of the decommissioning; would not pose an ongoing impediment to permissible landuse at the properties; and their retention has been agreed to in writing (with evidence provided to the **Secretary**) by the relevant landowners.

- G9. Any individual turbine that ceases operating for a period of more than 12 consecutive months shall be dismantled within 18 months after the 12 month period.
- G10. The Proponent shall prepare a Decommissioning and Rehabilitation Plan, which shall be submitted for the approval of the **Secretary** prior to the commencement of construction. The Plan shall be consistent with the requirements of the draft *NSW Planning Guidelines – Wind Farms* (December 2011), as updated. The plan shall be made publicly available. The Plan shall be updated every five years from the date of preparation, until decommissioning and rehabilitation is completed, and a copy of the updated versions provided to the **Secretary** and made publicly available. The plan shall include estimated costs of and funding arrangements for decommissioning, including provision for a decommissioning bond or other funding mechanisms, where the plan concludes that estimated costs and funding arrangements are inadequate.

Decommissioning Road Dilapidation

- G11. Unless otherwise agreed by the **Secretary**, the Proponent shall commission an independent, qualified person or team to undertake the following in consultation with the relevant road authority:
- (a) prior to the commencement of decommissioning, review the proposed route and existing access provisions to the Wind Farm Site to determine whether the route and existing provisions allow for safe access of decommissioning vehicles associated with the project (including appropriate site distances and provisions for over-mass or over-dimensional transport and safety with other road users). Where improvements or changes to the proposed route are required, the Proponent shall implement these in consultation with the relevant road authority, prior to the commencement of decommissioning and at the full expense of the Proponent;
 - (b) assess all roads proposed to be used for over-mass and/ or over-dimensional transport (including intersections, bridges, culverts and other road features) prior to the commencement of decommissioning to determine whether the existing road condition can accommodate the proposed over-mass and/ or over-dimensional haulage. Where improvements are required, the Proponent shall implement these in consultation with the relevant road authority, prior to the commencement of decommissioning and at the full expense of the Proponent; and
 - (c) upon determining the haulage route(s) for decommissioning vehicles associated with the project, and prior to decommissioning, an independent and qualified person or team shall undertake a **Road Dilapidation Report**. The report shall assess the current condition of the road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related to the decommissioning of the project. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage.

Following completion of decommissioning, a subsequent report shall be prepared to assess any damage that may have resulted from the decommissioning of the project.

Measures undertaken to restore or reinstate roads affected by the project shall be undertaken in a timely manner, in accordance with the reasonable requirements of the relevant road authority, and at the full expense of the Proponent.

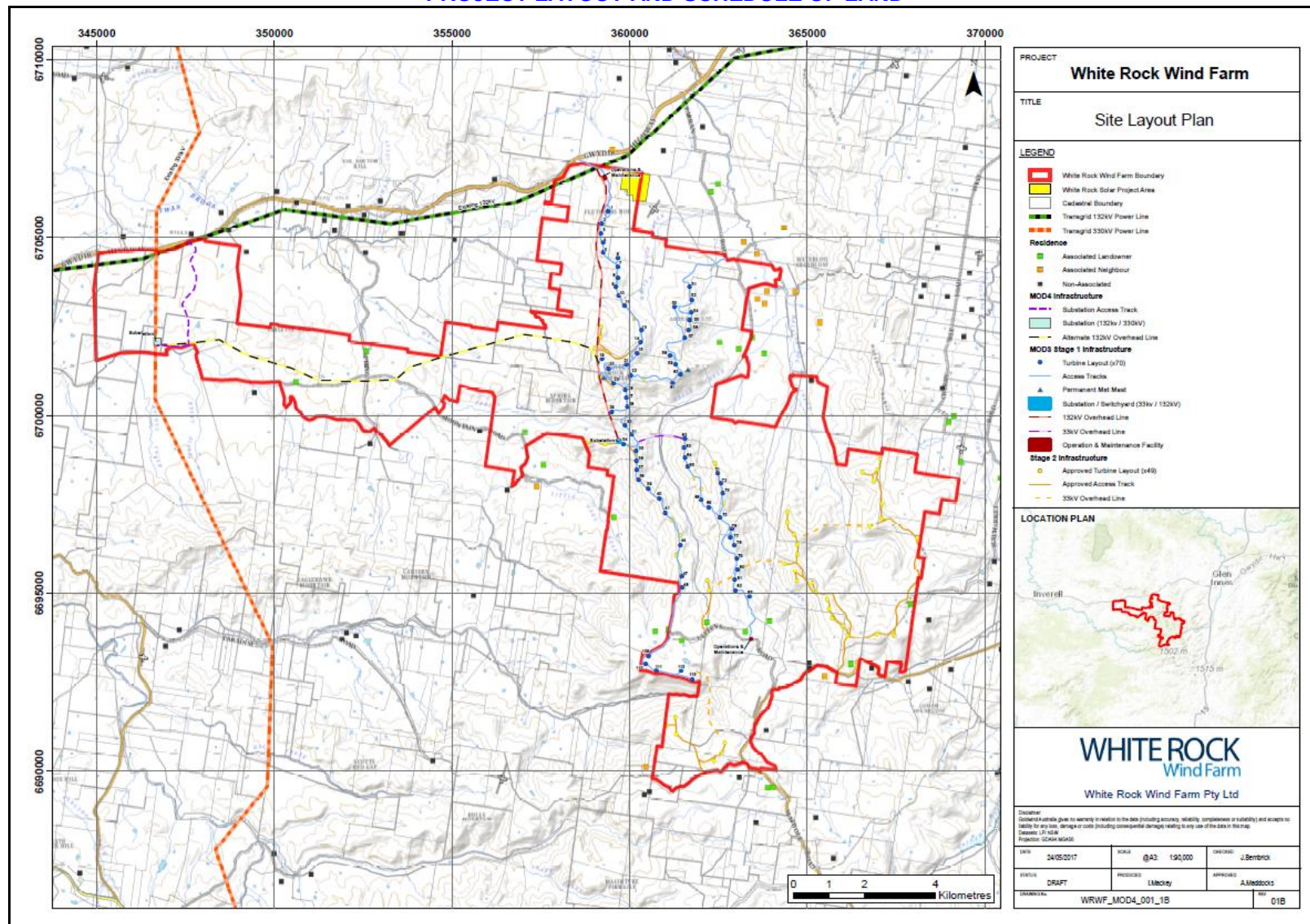
DECOMMISSIONING ENVIRONMENTAL MANAGEMENT PLAN

G12. Prior to the commencement of decommissioning, or as otherwise agreed by the **Secretary**, the Proponent shall prepare and implement (following approval) a **Decommissioning Environmental Management Plan** for the project. The Plan shall outline the environmental management practices and procedures that are to be followed during decommissioning, and shall be prepared in consultation with the relevant agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:

- (a) a description of activities to be undertaken during decommissioning of the project (including staging and scheduling);
- (b) statutory and other obligations the Proponent is required to fulfil during decommissioning, including approval/consents, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
- (c) a description of the roles and responsibilities for relevant employees involved in the decommissioning of the project, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval;
- (d) an environmental risk analysis to identify the key environmental performance issues associated with the decommissioning phase; and
- (e) details of how environmental performance will be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the decommissioning of the project). In particular, the following environmental performance issues shall be addressed in the Plan:
 - (i) compounds and ancillary facilities management;
 - (ii) noise and vibration;
 - (iii) traffic and access;
 - (iv) soil and water quality and spoil management;
 - (v) air quality and dust management;
 - (vi) hazardous material and waste management; and
 - (vii) hazard and risk management, including bushfire risk.

The Plan shall be submitted for the approval of the **Secretary** no later than one month prior to the commencement of decommissioning, or as otherwise agreed by the **Secretary**. The Plan may be prepared in stages, however, decommissioning works shall not commence until written approval has been received from the **Secretary**.

APPENDIX 1 PROJECT LAYOUT AND SCHEDULE OF LAND



SCHEDULE OF LAND

Lot	Deposited Plan
1	DP1005607
1	DP1061812
2	
2	DP1130567
7	
2	DP225300
4	
2	DP228716
1	DP600093
2	
116	DP705152
1	DP714164
2	
157	DP726527
78	DP753260
90	
119	
121	
122	
134	
136	
144	
153	
91	DP753270
94	
1	DP455212

Lot	Deposited Plan
49	DP753292
65	
75	
76	
77	
101	
103	
107	
111	DP753319
30	
31	
33	
124	DP778366
9	
1	DP840208
1	DP865325
3	
7	
1	DP873080
2	
1	DP883837
2	
1	DP1184223
1	DP1187044
2	
1	DP624913
141	DP753305
142	
3	DP1104129
108	DP753260
109	

Note: The project site will also be taken to include:

- any crown land, including road reserves, contained within the project site; and
- any land which is required for the road upgrades required under this approval.

APPENDIX 2

BACKGROUND NOISE SURVEY AND VERIFICATION REPORT

Consistent with condition F6 and prior to commissioning of the wind farm, the Proponent must prepare a noise assessment report that includes but is not limited to the following:

- (a) Background noise levels for each of the relevant receiver locations that are not associated with the White Rock Wind Farm. The background noise level data must be collected in accordance with the requirements and recommendations of 'Section 3.1 Background Noise' of the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009).
- (b) Address and GPS location of all non-associated relevant receivers.
- (c) Wind speed measurements for at least each integer wind speed from cut-in speed to the speed up to the rated power of the wind turbine generators in accordance with the requirements of Section 3.2 of the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009).
- (d) Predicted noise levels at all relevant receiver locations that are not associated with the White Rock Wind Farm for each integer wind speed from cut-in speed to the speed of the rated power in accordance with the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009). Noise modelling should be representative of final turbine selection and layout design.
- (e) Where operations need to be controlled under certain meteorological conditions in order to meet noise criteria set out in condition F7, these controls (such as sector management) must be described in detail.
- (f) The noise assessment report should include all the documentation required by Section 5.1 and 5.2 of the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009).

APPENDIX 3 NOISE COMPLIANCE ASSESSMENT

PART A: SOUTH AUSTRALIAN WIND FARMS: ENVIRONMENTAL NOISE GUIDELINES 2009 (MODIFIED)

Unless stipulated otherwise, South Australian *Wind Farms: Environmental Noise Guidelines 2009* (Modified) refers to the South Australian EPA document modified for use in NSW. The modifications are as follows:

Tonality

The presence of excessive tonality (a special noise characteristic) is consistent with that described in *ISO 1996.2: 2007 Acoustics — Description, measurement and assessment of environmental noise – Determination of environmental noise levels* and is defined as when the level of one-third octave band measured in the equivalent noise level $L_{eq(10\text{minute})}$ exceeds the level of the adjacent bands on both sides by:

- 5dB or more if the centre frequency of the band containing the tone is in the range 500Hz to 10,000Hz;
- 8dB or more if the centre frequency of the band containing the tone is in the range 160 to 400Hz; and/or
- 15dB or more if the centre frequency of the band containing the tone is in the range 25Hz to 125Hz.

If tonality is found to be a repeated characteristic of the wind turbine noise, 5 dB(A) should be added to measured noise levels from the wind farm. If tonality is only identified for certain wind directions and speeds, the penalty is only applicable under these conditions. The tonal characteristic penalty applies only if the tone from the wind turbine is audible at the relevant receiver. Absence of tone in noise emissions measured at an intermediate location is sufficient proof that the tone at the receiver is not associated with the wind farm's operation. The assessment for tonality should only be made for frequencies of concern from 25 Hz to 10 KHz and for sound pressure levels above the threshold of hearing (as defined in *ISO 389.7: 2005 Acoustics - Reference zero for the calibration of audiometric equipment - Part 7: Reference threshold of hearing under free-field and diffuse-field listening conditions*).

Low Frequency Noise

The presence of excessive low frequency noise (a special noise characteristic) [i.e. noise from the wind farm that is repeatedly greater than 65 dB(C) during the day time or 60 dB(C) during the night time at any relevant receiver] will incur a 5 dB(A) penalty, to be added to the measured noise level for the wind farm, unless a detailed internal low frequency noise assessment demonstrates compliance with the proposed criteria for the assessment of low frequency noise disturbance (UK Department for Environment, Food and Rural Affairs (DEFRA, 2005)) for a steady state noise source.

Notes:

- For the purposes of these conditions, a special noise characteristic is defined as a repeated characteristic if it occurs for more than 10% of an assessment period. This equates to being identified for more than 54 minutes during the 9 hour night from 10pm – 7am, or for more than 90 minutes during the 15 hour day from 7am – 10pm. This definition refers to verified wind farm noise only.
- The maximum penalty to be added to the measured noise level from the wind farm for any special noise characteristic individually or cumulatively is 5 dB(A).
- Notwithstanding conditions F7 and F8 of this project approval, the noise limits specified under these conditions do not apply to any residence where a noise agreement is in place between the Proponent and the owner(s) of those residences in relation to noise impacts and / or noise limits. For this condition to take effect, the noise agreements shall satisfy the relevant requirements of *Guidelines for Community Noise* (WHO, 1999).

APPENDIX 3
NOISE COMPLIANCE ASSESSMENT

PART B: NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions – Wind Turbines

1. The noise criteria in condition F7 of the conditions are to apply under all meteorological conditions.

Applicable Meteorological Conditions – Other Facilities

2. The noise criteria in condition F8 of the conditions are to apply under all meteorological conditions except the following:
 - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
 - (b) temperature inversion conditions between 1.5°C and 3°C/100m and wind speeds greater than 2 m/s at 10 m above ground level; or
 - (c) temperature inversion conditions greater than 3°C/100m.